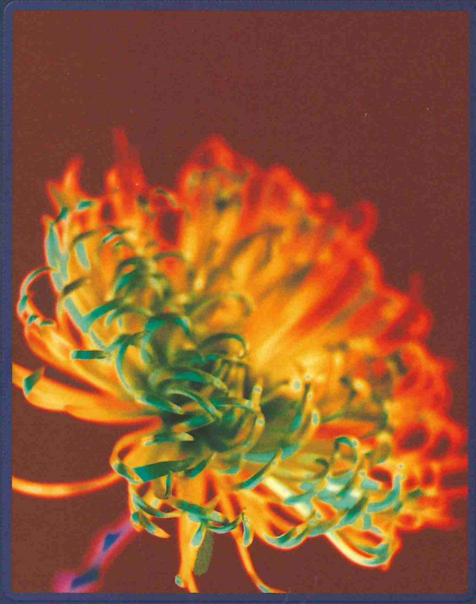

Group Scenarios 1998-2020

Volume 2: Regions and Quantification

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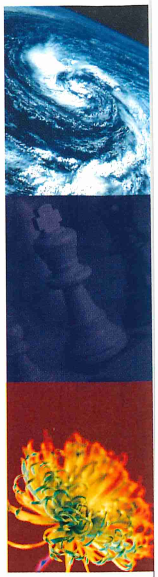
Group Scenarios 1998 - 2020 Volume 2: Regions and Quantification

Volume 2 is a companion volume to *Group Scenarios 1998 - 2020*. It shows how the two scenarios develop in selected regions of the world. It also quantifies the global economic and energy implications of the two scenarios.



Contents

Africa

Why Has Africa Failed?

Africa is the victim of its past. The problem lies partly in the geographical, zoological, and agricultural factors that seem to have given Africans a built-in disadvantage against Europeans, and partly in the more recent effects of colonisation and its aftermath. When the Europeans withdrew, power was not returned to the traditional chiefs and kings from whom it was taken by force, but to rulers who believed in the superiority of western institutions. These modern leaders were not interested in learning from their pre-colonial forefathers, feeling that African history had little to teach the present and future generations. But neither were they equipped to carry on the European style of governance. When the Europeans withdrew, they took everything with them – their organisational, financial, and other support, and sometimes even their bath plugs. The incoming governing bodies were left to build a system from scratch, often without the necessary expertise or support. The infrastructure supplied and maintained by the colonialists, from roads to laws, degenerated.

Why Did Europe Colonise Africa – and not Vice Versa?

Crops and animals domesticated in one part of Africa have traditionally had great difficulty in moving to other parts, principally because the main axis of Africa is north-south, across different climatic zones. This is in contrast to Eurasia, where crops and animals moved easily over thousands of miles, at the same latitudes, sharing similar climates and day lengths.

Indigenous crops in Ethiopia and West Africa all originated north of the equator. Southern Africa's wild plants were not suitable for agriculture, and African domestic animals, such as the African buffalo, zebra, and rhino, were unsuitable for domestication, in contrast to the horse and cow in Europe. The slow passage, or complete halt, of crops and livestock movement along Africa's north-south axis had major consequences. The Sahel crops, for example, brought by the Bantu from north of the equator into Southern Africa, could not grow at the Cape itself, thereby halting the advance of Bantu agriculture.

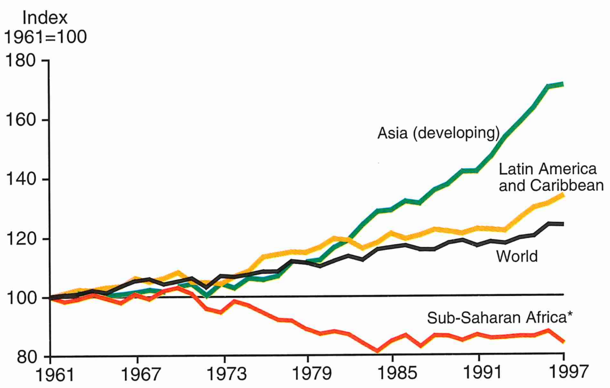
The reason Europe colonised Africa, rather than vice versa, no longer seems to have been the result of differences between European and African people themselves, as whites have sometimes assumed. Rather, it is related to accidents of geography – in particular, to the continents' different areas, axes, and wild plant and animal species.

See Jared Diamond, *Guns, Germs, and Steel,* 1997.

Corruption and authoritarianism were widespread as newly independent countries struggled to find their feet. Military rulers kept democracy at bay and dealt brutally with those stepping out of line. The citizens, who had fought and suffered for independence, were not expecting what they got: repression, governments that couldn't afford basic services, corruption, and a steady deterioration of the conditions of daily life.

Meanwhile, leaders followed a variety of economic models, most of them imported from the west or the communist bloc, and all of them misguided. Decades after the end of colonial occupation, Africa still casts about for answers to the questions of which way to go forward, and of how the continent can harness its resources. Since independence, Africa has continued to rely on her former colonial rulers and international financial institutions, such as the IMF and the World Bank, for guidance on growth strategies.

Food Production Per Person

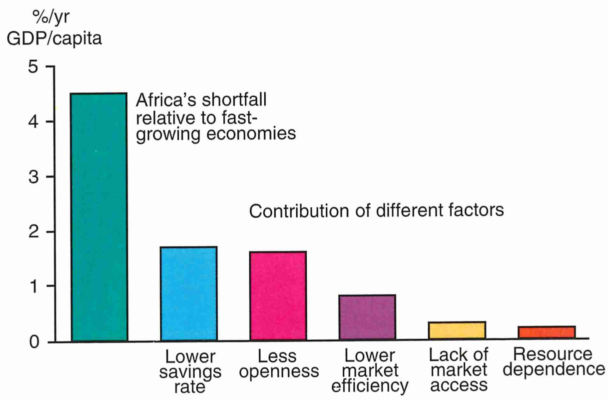


* Excludes South Africa

Source: *FAOSTAT*

In the past two decades, African economic performance has been worse than that of other regions. In large parts of the continent, per capita incomes have been falling. During the 1980s, per capita GDP declined by 1.3% per year, a full 5% below the average for all low-income developing countries. During the 1990s, the situation has worsened, both absolutely and relatively. In 1994, the decline in per capita GDP accelerated to 1.8% per year, and the gap with the other low-income developing countries widened to 6.2%. The capital-output ratio in Africa was lower in 1990 than in 1965. In 1965 it was half that of East Asia, but by 1990 it was a mere quarter. Since 1979, capital per worker has declined by nearly 20%.

The African Shortfall



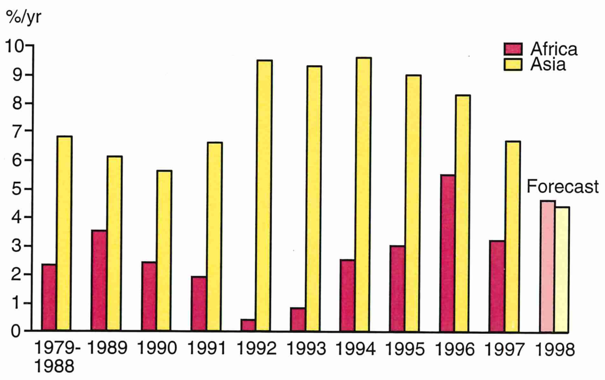
Many factors – a general lack of true democracy, poor educational standards, tribal and ethnic conflicts – contribute to Africa's poor long-term growth performance. But a statistically based study has identified six factors as the most important ones: protectionism and inwardlooking policies; suppression of private enterprise; lack of clear rules; high taxes; low savings rates; and adverse structural conditions, including inaccessibility to the sea (15 of 53 countries are land-locked). These difficulties are compounded by the high reliance on natural resource exports and by Africa's anti-market orientation, which is rooted in a fear that open trade and foreign capital pose a threat to national sovereignty. As a result, most of Africa is in a largely self-imposed economic exile. When 'self sufficiency' and 'state leadership' are guidelines for economic development, potential donor governments and international financial institutions respond by turning their backs.

A further problem has been the high level of armed conflict. Many of Africa's internal wars – in the Congo, Ethiopia, and Angola, for example – have resulted directly from the cold war, or, as in Mozambique, were linked to attempts to maintain South Africa's apartheid regime. Others, as in Sudan, Rwanda, and Burundi, were the result of deep ethnic divisions. More recently, in countries such as Liberia, Sierra Leone, Somalia, and Zaire, the collapse of the state and the resulting absence of law have led to growing pessimism over Africa's powers of recovery. Meanwhile, tribal wars continue to be waged over the main commodity, land.

Positive Signs

In spite of these difficulties, a small number of countries have recovered and grown quickly. Botswana, for example, has built a successful economy, although some doubts about long-term sustainability remain. Classified as one of the world's 20 poorest countries at independence 30 years ago, the country is now a solid member of the World Bank's group of middle income countries, boasting Africa's fourth highest per capita GDP. A diversified and carefully managed mining sector is credited with driving nearly two decades of 8% growth. Mauritius and Namibia are also success stories, while Uganda, Mozambique, and Ghana appear to be recovering after suffering hard

Africa and Asia: GDP Growth



Source: *IMF, World Economic Outlook May 1998* times. Over the last few years, Africa's GDP growth, although still behind that of Asia, has been catching up. The end of the cold war and the demise of apartheid have, to a large extent, ended the conflict in Southern Africa. Mozambique and Namibia are at peace, and in Angola the fighting is subsiding. Uganda has recovered, to a degree, from years of civil war, and, with the encouragement of an enlightened leadership, democracy is beginning to emerge there. External efforts at peacekeeping are declining, as, at least until very recently, the US and France have shown benign disinterest in Africa. It is up to Africa to find a solution.

State of Transitions in Africa through 1994

Precluded	Blocked	Flawed	Democratic
Liberia	Angola	Burkina Faso	Benin
Sudan	Burundi	Cameroon	Cape Verde
	Chad	Comores	C.A.R.
	Ethiopia	Côte d'Ivoire	Congo
	Guinea	Djibouti	Guinea-Bissau
	Nigeria	Equatorial Guinea	Lesotho
	Rwanda	Gabon	Madagascar
	Sierra Leone	Kenya	Malawi
	Somali	Mauritania	Mali
	Tanzania	Swaziland	Mozambique
	Uganda	Togo	Namibia
	Zaire*	Zimbabwe	Niger
			Seychelles
			South Africa
			Zambia

In Liberia and the Sudan, civil war and other forms of popular armed resistance precluded any kind of transition, or gave the rulers an excuse to harden their rule. In the next category of countries, political reforms were launched but never fully realised.

Transitions are described as 'flawed' where incumbent strongmen resisted them but could not fully stop opposition demands for political reform. These politicians used the power of incumbency to dictate the rules of the political game by manipulating electoral laws, monopolising campaign resources, and interfering with the polls. The results are evident in Cameroon, Gabon, Ghana, and Kenya, where dubious elections returned the incumbent to power.

If we add the16 countries that experienced democratic transitions between 1990 and 1994 to the pre-existing African multi-party regimes, then 45% of African countries can be said to have achieved minimal attributes of democracy by the end of 1994. Conspicuously, however, democracy in Africa is restricted mainly to small states. Out of 21 currently democratic regimes, nine had populations of fewer than two million in 1989, and four had populations of fewer than one million. Only 25% of Africans are living under democratic regimes.

*now the Democratic Republic of Congo

Source: Michael Bratton and Nicolas van de Walt, Regime Transitions in Comparative Perspective

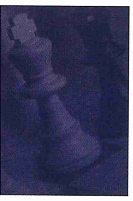
Africa is emerging from years of chaos and is beginning to establish itself as ready for a new start. In a sense, Africa is in year zero – its true transformation is just beginning. It is up to each country in Africa and the combined countries of regions in Africa to find solutions to their individual challenges that won't promote or foster more long-term dependency on outside aid.

Issues for the Scenarios

Africa is regarded by some as a continent of genocide, ethnic wars, drought, poverty, and a fraying social fabric. Both scenarios address the issues facing countries as they attempt to recover from this negative legacy, to meet the challenges of TINA, and to bring back into the political system such people as the marginalised tribes in Rwanda, Somalia, Sudan, Sierra Leone, Democratic Republic of Congo, and Nigeria. In addition, many African countries face other questions: identity (national, communal, racial, and gender); accountability (sorting out exclusive patronage networks); education; the functioning of civil society and institutions; and the narrowing of the rich-poor gap to create a strong middle class.

"Let me state clearly and unequivocally that an electoral victory by any military candidate in the forthcoming presidential elections in Nigeria would be unacceptable."

Susan Rice, US Assistant Secretary of State for African Affairs, March 1998



The New Game

In ***The New Game*** there are early successes as a new brand of leadership brings liberalisation and democratisation to some countries in the Sub-Saharan region. Leaders in Uganda, South Africa, Namibia, and Mozambique lay the groundwork for a region of good government and prosperity through Central Africa, linking to South Africa. Technological and telecommunications revolutions begin as African governments from Ethiopia to South Africa and Uganda to Senegal end state monopolies.

TINA drives the countries of Sub-Saharan Africa into a fast-moving world with a clear set of rules, embracing political, economic, and social reform, and requiring institutions to guide them. The globalising forces of liberalisation and technology cannot be avoided, so embracing TINA is not seen as a matter of choice. The experiments in the pioneering countries help to make their models of economic development acceptable across ideological boundaries. The short-term outlook in ***The New Game*** is, however, dubious, and instant success is not possible. Economic redesign creates new political problems, with new winners and losers, and a rising demand for accountability and transparency. FDI is mostly directed towards Southern Africa and oil-producing countries such as Angola, Gabon, and Nigeria. In addition, it takes some years to rid the continent of the contagion through which bad news from one country affects perceptions of Africa in general.

In ***The New Game***, South Africa continues to invest in the Southern African region. This investment, however, raises fears among poorer countries and those countries that have just emerged from civil and ethnic wars, that liberalisation might lead to domination by South Africa and therefore is not in their interests. While South Africa attempts to extend political reform to embrace economic and social change, the management of the rising expectations of marginalised people becomes increasingly difficult. South Africa struggles to establish reconciliation and transformation among all the people, to develop national identity and pride, and to redefine redistribution and participation in the economy. Economic efficiency depends on predictability and private sector capital flows, and leaders recognise that the pace of change needs to be mitigated by these hard realities.

In meeting these aims, the foundations laid in South Africa in the 1990s, through the Truth and Reconciliation Commission, the Human Rights Commission, and the Poverty Commission, prove to be decisive. In ***The New Game***, the South African government's reform programmes aimed at economic growth, employment, and redistribution, enjoy broad support, including that of the trade unions. As it becomes friendlier to business, South Africa sets an example for other southern African countries, laying down a solid basis of rules, and cracking down on the crime syndicates – including the hijackers of Shell tankers – that move goods across borders.

African Solutions and Economic Recipes

In the mid-1990s, several African economies, particularly Uganda, saw relatively rapid growth for the first time in decades. A fairly simple underlying picture emerges. The secret to success lies in three factors: absence of war, stable prices, and open and deregulated markets.

Country Environment*	Share of African Population	Per Capita Output Growth
Inadequate social order	*12%*	*-4.0%*
Inadequate macro-policies	*46%*	*-1.3%*
Inadequate resources allocation	*12%*	*-2.8%*
Minimal adequate environment	*23%*	*3.2%*
Already middle income	*8%*	–

In a sense, it does not take much for very poor countries to succeed. Technically, the required economic policies are simple. "Do not steal from people, or arbitrarily tax them" and "Let people make their own decisions" are the basic maxims, implying sensible tax systems, open markets, and stable prices. Uganda has used the cash rule for fiscal management – "Don't spend when you have no money." Mauritius has declared itself to be a free trade zone. The CFA zone in West Africa has renounced monetary authority by pegging its currency to the French Franc (and soon the Euro), setting up a currency board to ensure that this happens.

The hard part is to establish social order and to get predatory governments to restrain themselves. There is no economic recipe for this, but the basics are clear. Governments are required to maintain peace and basic rules, particularly the protection of property and contracts. This implies that governments must renounce discretionary intervention, relying on rules to tie their own hands. Weak governments are in particular need of such restrictions. For example, when true central bank independence remains implausible in the face of interference from the President, countries may choose to give up monetary autonomy. They could do this, for example, by relying on currency boards to ensure strict control of the money supply, or by adopting another currency, as in Panama, where the US dollar is used.

Globally, the governments that have adopted stringent rules restricting government authority are those with a rocky past and the strong desire to break out of it. Key cases are Argentina, Estonia, Lithuania, Bulgaria, and Hong Kong with currency boards, and Uganda and Bolivia with the cash-rule for fiscal management. Chile is the breakthrough performer, shedding public ownership in most of the economy, and opening the borders to trade following a severe crisis in the early 1970s.

* Source: P Collier and J W Gunning, *Explaining African Performance*, Centre for the Study of African Economies, Oxford

As the realisation grows that there really is no alternative, countries which are on the path to democratic transition develop public-private sector partnerships as the channel of development. Private sector and governments in West, East, and

Southern Africa create Development Centres and a chain of think tanks to help provide ideas, develop and use technology, and exchange experience. Africa looks at itself, stops blaming its colonial past, and works to solve its own problems. The three Development Centres are staffed by well-educated people from all over Africa, and provide opportunities for connections among ideas, people, and governments. The Centres deliver political and economic policies for the regions and address such issues as the accountability of leaders, transparency in government, checks and balances, adherence to the rule of law, peaceful means to change leadership, and respect for human rights. Debates about the equitable distribution of the increasing wealth are also on the agenda.

By 2005, as the Centres become fully-fledged, investors are beginning to show increasing confidence, and economic growth accelerates in every five-year cycle. Even those governments propped up by oil realise that in a $10/bbl world, oil is not enough, and begin to change their old predatory behaviour.

As the better educated graduates from the Centres enter government, African countries increasingly follow in the footsteps of Mauritius, Ghana, Uganda, South Africa, Mozambique, and Gabon, by abandoning the old command economies and embracing economic liberalisation. They deregulate their economies, privatise state-owned assets, and seek integration with the world economy. In the early years, however, prosperity is confined to the cities. The benefits of urban booms do not truly spread to rural areas until later in the scenario period.

Most of the successful countries institute good learning and information systems. The continent's telecommunication services position themselves for a major revolution. By 2008, the Abidjan-based Regional African Satellite Communication Organisation (Rascomm) installs half a million solar-powered telephone stations with international access across the continent, enabling communication with even the most remote areas. Africa is linked to the rest of the world through under-water fibre optic cables, removing at a stroke a key element deterring foreign and domestic investment.

Another issue, which is gradually tackled through the sensible use of focused

institutions, is AIDS. Uganda has set an example of how to manage AIDS through education and nation-wide campaigns. In ***The New Game,*** Uganda's example is followed throughout Africa via the AIDS Institute, which, through the support of governments and businesses, is given the resources to mount local and national campaigns throughout the continent. The Southern African Development Community (SADC) and the OAU also place AIDS high on their agendas, thereby giving the AIDS Institute additional political support.

As more African countries adopt democratic processes, the OAU starts to move from purely political concerns to governance, investment, and economic growth. By 2005, the OAU is beginning to look rather like the original European Community, its agenda including common market goals and objectives. As some OAU countries begin to succeed, other African countries join the OAU club and help to drive the agenda of investment, trade and currency issues.

The SADC presses ahead with deeper integration. To counter the fears of poorer countries that liberalisation is not in their best interests, SADC works in parallel with the Pan African Development Centre to ensure that policies are implemented on trade, investment and growth. SADC is also involved in peacekeeping efforts in the Central Lakes area, Burundi, and Rwanda. The private sector is a key partner on all committees in SADC – and eventually SADC is run by a business secretariat, which is well-poised to help its member countries make progress through trade and other co-operative agreements.

Although ethnic clashes persist, particularly in Rwanda and Burundi, Eritrea, Ethiopia, and Sudan, the governments of South Africa, Uganda, Botswana, and Mozambique develop peace-keeping and diplomatic efforts through regional initiatives. By 2005, a Central African Peace Force (CAPEF) is set up to maintain order. Strife-torn countries join the club to maintain peace.

With oil prices of around $10/bbl, oil-producing countries, such as Nigeria and Angola, are forced to reform or sink more deeply into the mire. Nigeria itself is eventually forced to accept the need for reform and liberalisation, as the state is, in effect, bankrupt.

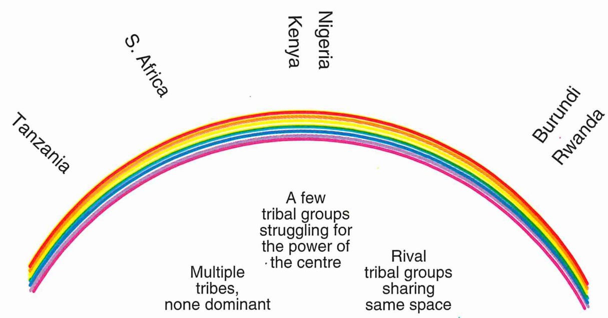
People Power

In ***People Power***, people expect and demand improved education systems, better quality housing, and jobs and employment for all. Unfortunately, most African states are incapable of delivering these things.

Although by 2002, economic reform is taking place in countries such as Botswana, Namibia, South Africa, Uganda, Mozambique, and Mauritius, Africa still lags several decades behind other nations. The weak rule of law and non-transparency in government slow economic growth. In addition, Africa is further burdened by infectious diseases, with malaria an ever-increasing scourge.

In ***People Power***, national governments find it difficult to adjust to the effects of TINA, fail to apply consistent policies, cannot come to terms with the changing nature of the state, and in some cases prove unwilling to yield the benefits of authoritarian power. But the advantages of authority become increasingly hard to capture. People begin to find their own solutions and are less prepared to accept bad governance. Governments become weaker as a result, and countries such as Nigeria, Democratic Republic of Congo, Rwanda, Burundi, Eritrea, Ethiopia, and Sudan, are unable to respond to the inevitable series of shocks, including AIDS and new infectious viruses. Ethnic unrest on the fringes of Uganda and Kenya escalates and profoundly influences the perception of Africa by the rest of the world. People lose faith in the existing rules of the land and in the traditional political structures, which have resulted in weak, rapacious, and predatory governments.

The Range of Ethnicity



In such times, governments become increasingly irrelevant, and educated and literate people are encouraged to challenge the regimes. More and more, even die-hard dictators are obliged to bow to public demand and promote genuine

democracy. Many of them find themselves in the position of Hastings Banda in 1994. Banda, the ruler of Malawi, had declared himself a life President and refused to have any further elections – but in spite of his declaration, ill health and unpopularity forced him out. In a manner reminiscent of events in Indonesia in 1998, popular demand forces a change of leadership in many key countries.

In countries such as Nigeria, dependent on major natural resources, the main private sector industry is disconnected from the rest of the economy, and government is expected to deliver the goods from rents levied on natural resources. Economies such as Somalia, Rwanda, and Burundi are steered by leaders whose horizons are narrowed by tribalism. In the countries experimenting with democratic transitions, the politics of patronage impede economic growth, democracy, and accountability.

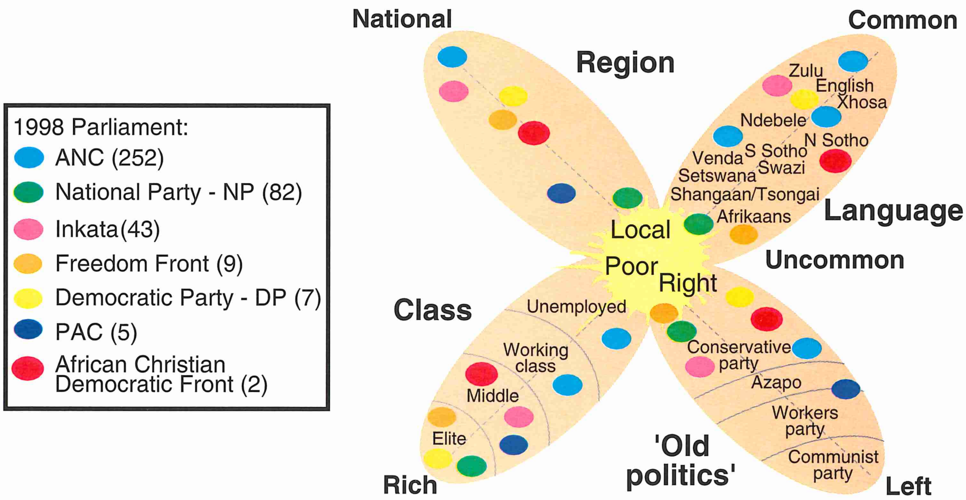
There is a search for an 'African Solution' – but not via institutions such as the World Bank and the IMF, whose conditions seem inadequate to deal with complexity and diversity. Increasingly, the people themselves drive their own regimes to change and challenge traditional political structures.

After 2004, the ANC splits from the unions and the Communist Party. In the short term, the unfulfilled expectations of the have-nots give South Africa a rough ride, as the unemployment rate increases to 50%, and the government finds itself unable to deal with crime and other social issues. Interest rates continue to rise, the rand is further devalued, and the deficit, before borrowing, rises to 8%. The government institutes economic controls and tries to develop a siege economy, but nothing works. In response to government weakness, corporations, NGOs, and other stakeholders coalesce to form new alliances in an attempt to tackle social issues. These developments in South Africa clearly impact on the whole Southern African region, since South Africa alone accounts for 74% of the SADC output.

In the short term, Nigeria continues to drift on the fringes of the international community, with an impoverished hinterland increasingly detached from the still-

functioning oil economy – as happened in Angola, which continued to export oil during its 20-year civil war. A period of severe oil price volatility sparks off civil unrest, which brings a rather ineffective tightening of military control. International sanctions restricting oil sales are applied, and the loss of income is followed by further riots and looting. But in the long term, Nigeria begins to show some signs of success, as people seek economic activity outside the boundaries and scope of the regime. The robust entrepreneurial tradition manifests itself in a

Flowering of Politics in South Africa



thriving underground and semi-legal economy. Towards the end of the scenario period, a growing number of non-governmental institutions emerge, with the support of business, to replace inefficient government bodies. As the Southern Coastal traders thrive across national boundaries, the perception of regional integration by the smaller West African states changes. Despite the predatory government in Nigeria, the economy takes off in a non-traditional and non-conformist way with anarcho-capitalism and entrepreneurial capitalism flourishing. Little of this activity is recorded in Africa's official statistics. New networks develop as people trade with neighbouring countries, and many Nigerians thrive. The perceived opportunities in the West African region outweigh fears of domination by Nigeria.

Private armies emerge in many countries as striking signals to governments of the people's discontent. They are used in Chad, Angola, and Sierra Leone, for example, where some form organisations like Executive Options. Organisations and companies in ***People Power*** look to these radical arrangements to provide security of property.

As entrepreneurship booms, local and provincial governments gradually learn to become more organised as they attempt to participate in the fruits of economic success.

Entrepreneurship as a Development Tool

In South Africa, during the apartheid era, the regime did not provide any bus or train services to the townships. The private taxi industry, supported by private sector businesses, tackled this issue and, to a large extent, solved it. Partnerships formed, in addition, between businesses and corporations to address unemployment and other infrastructure problems. Enterprising market traders, for example, have used branded Shell oil drums with African-style stands to display their goods.

In ***People Power***, where governments fail to deliver anti-malaria health care programmes, businesses and NGOs develop partnerships to manufacture durable malaria nets for use in urban and rural areas. This entrepreneurial activity, as well as improving the general level of health, gives a boost to local trade. AIDS gets addressed through individuals taking more accountability for their own actions. Condoms become a major growth industry.

The new leaders of the Democratic Republic of Congo, Rwanda, and Burundi have failed to meet expectations, and civil uprising rooted in tribalism erupts. Central Africa is in turmoil, with outbreaks of genocide, and mass migration down to Southern Africa. The Horn of Africa continues to be crippled by drought and malaria. The 'white spaces' of no government spread through most of the African countries. Some state boundaries become irrelevant in the face of mass migration.

Museveni maintains political stability in Uganda, but only until 2005. As political instability continues in other parts of Central and East Africa, aid is discontinued. Kenya, which is dependent on aid, struggles to extract itself from the economic quagmire as tea and coffee prices decline, and horticulture and tourism are disrupted by uncertain communications and by anti-Kenyan campaigns in some OECD countries. The weakness of the Kenyan economy undermines other East African countries.

In some countries, there are small oases of growth and entrepreneurship. In parts of Angola, for example, after a 20-year civil war, the peace process gradually succeeds, and the economy becomes open to foreign investment in natural resources and infrastructure. Similarly, in Cameroon, the educated, articulate opposition and fiercely independent press are powerful forces for change, and succeed in making a difference in the region.

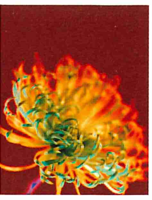
In strife-torn countries, strong civic partnerships emerge through alliances with religious coalitions, NGOs, local businesses, and the media, to express criticism and political dissent. These coalitions create the awareness that the state needs to be reconstituted for national revival. In towns and in villages, leaders emerge as people resort to local solutions.

Civic Partnerships

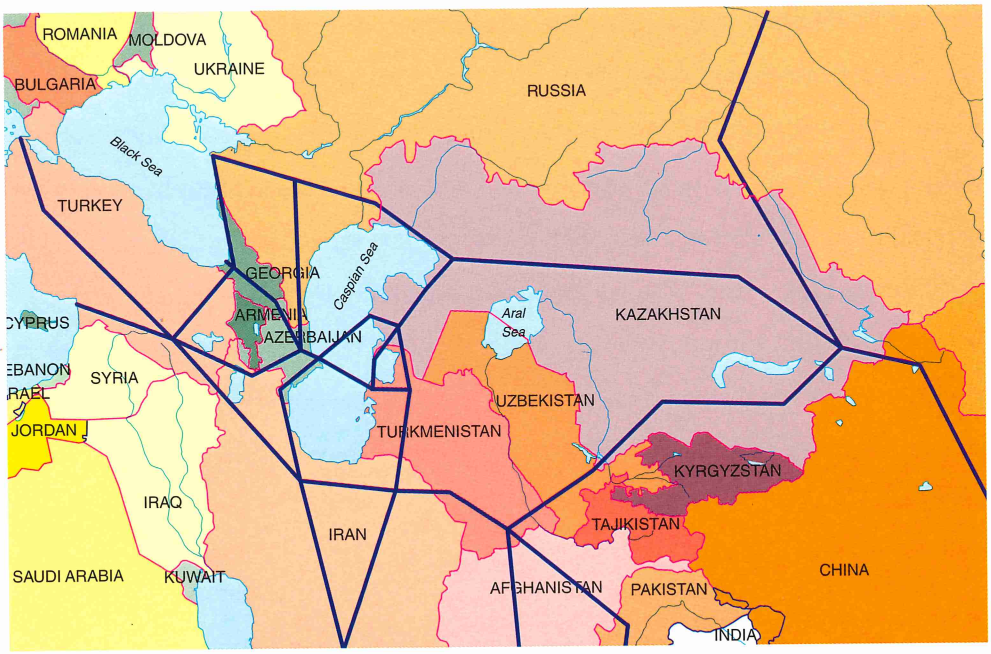
During the apartheid era, South African extra-parliamentary politics grew, representing the unheard and disenfranchised people in the country. Partnerships developed between educational institutions, NGOs, churches, civic organisations, and businesses, to develop alternative channels for education. Examples of these are the Joint Education Trust, National Business Initiative, Urban Foundation, and the Consultative Business Movement. Through these partnerships, the disenfranchised learned to cope in difficult circumstances.

Gradually, awareness grows of the benefits of sound economic policies, democracy, openness, and transparency. The successes of the front-runners, including Mozambique, Ghana, and Côte d'Ivoire, spark off more general debate about political reforms. People at the end of the scenario period begin to cope, as authentic civic institutions begin to emerge.

Pessimists see little improvement by 2020 in ***People Power***. There are, indeed, some successes, such as Angola, Cameroon, and Southern Nigeria. But there are still areas of near anarchy, and governments remain weak even where they are



honest. Still, there are signs of progress. Health indices are improving. Given the prevalence of underground and unrecorded activity, GDP is hard to measure, but there is evidence that living standards are improving: numbers of cars, computers, and other appliances are growing very fast. In general, even with the uneven development of countries in ***People Power***, there is a new spirit of self-reliance, as Africans seize opportunities and create new networks to help themselves move forward.



Proposed Oil and Gas Pipelines

Central Asia and the Caucasus

The Current Miasma

The Caspian region today is clouded in uncertainty. There is the opportunity for prosperity – including major oil prospects in Azerbaijan and Kazakhstan and gas prospects in Turkmenistan and Uzbekhistan. But there is also suspicion and the fear of exploitation.

Kazakhstan appears best placed to exploit the opportunity. The current regime rules with authoritarian panache, but hasn't yet found a way to balance the interests of different clans. Kazakhstan's chosen solution is economic growth; and, through economic diversification, it has also laid the basis for sustained reform. Yet while the Kazakh President may mouth the words of globalisation, whether he appreciates what globalisation will do to long-standing Kazakh ways and traditions is uncertain. And as Kazakhstan has moved forward, expectations have risen sharply, exceeding the forward movement. The widening gap between rich and poor has left many people with a sense of relative decline and a loss of confidence in reform, which is bogged down by a legacy of unfunded welfare and pension liabilities. Should the reforms fail to deliver soon, political instability may follow.

The situation is equally fraught in Uzbekistan and Turkmenistan. In spite of a heavy-handed pretence at reform, the economies of these two countries remain closed, while their societies careen towards irreparable fractures. Without firm leadership, Uzbekistan appears rudderless, drifting without a sense of economic direction. Turkmenistan, with its enormous gas potential, has cautiously begun a reform programme, but progress is slow, and the external environment is uncertain, especially in relation to Russia, Iran, and Afghanistan.

In Azerbaijan, Armenia, and Georgia, localised conflicts destabilise the region as a whole and threaten to ignite wider conflicts involving outside powers. Meanwhile, irregular government forays nip at the heels of unorthodox, freewheeling private businesses.

An integrated approach to energy transport, through pipeline grids, has the potential to tie the region together. But while individual leaders are aware of this potential prize, they may not be able to carry their people with them.

The New Game – Silk Road into the Desert

In *The New Game*, Central Asian governments reform, but are undermined by an international regime of unremittingly low oil prices and declining foreign investment interest. Uzbekistan emerges as the regional exemplar, in part because Uzbeks seem to be most committed to keeping the long-term strategic

focus necessary for growth, while at the same time maintaining the balance of domestic interests necessary for the management of expectations. The Uzbek example is copied elsewhere in the region, first in Kazakhstan, and then Turkmenistan, but the low oil price delays vital foreign investment projects, leading to retrenchment and austerity.

This unsatisfactory situation persists in spite of the Caspian Sea security agreement of 2000, which provides the security needed by the regional states for joint exploitation of resources. Russia, crucial to the formation of this agreement, fully supports it. With Gazprom and Lukoil in various Caspian consortia, an economically driven policy towards the region is encouraged. Prospects look good, as the oil price climbs higher early in the century, and foreign companies rush for concessions. A kick-start for regional economies is provided by this heightened foreign interest, and Kazakhstan finds that large licence-signature bonuses help ease its immediate funding concerns.

Uzbeks, however, treat the new largesse with a certain reserve. Ordinary Uzbeks expect a better life, and government officials fear that meeting those expectations may be difficult. In 2001, with IMF backing, Uzbekistan begins a process of reform and gradual market liberalisation, stressing education and attempting to bring rural populations into a more broad-based development programme. Although the political system remains authoritarian, it at least sets a predictable framework for steady growth. In a cautious and understated manner, Uzbekistan becomes the model for economic reform in the rest of Central Asia. Turkmenistan follows, exporting in order to survive, and regional co-operation brings the other players on board.

Joint agreement on the Caspian is matched in the same year by an economic alliance between Kazakhstan, Uzbekistan, and Kyrgyzstan. The alliance is initially intended to co-ordinate gas pipeline routes, but is soon broadened to include cross-border infrastructure (transport, power, and water) and the encouragement of regional trade.

The Caspian Sea Security Agreement holds, and the resulting peace in the region gives Central Asian governments their first breathing space for growth and reform. As the region takes its first cautious steps towards economic liberalisation, economies begin to stir, and growth rates rise to 7% by 2002.

Meanwhile, in the South Caucasus, the Organisation for Security Co-operation in Europe brokers an agreement on Karabakh, raising the profile of the US in the region as a result, and ushering in a broader stability on that side of the Caspian as well. Political disputes in the North Caucasus lead Russia to insist on regional stability, in part because Russian interests are increasingly gas- and oil-driven. This interest parallels US desires to support stability in the region – a conjunction of interests that increases investment in pipeline routes from the western side of the Caspian Sea. Baku emerges as the centre of the Caspian oil industry. There is a raffish tinge, though, to economic development in the South Caucasus, with various regional mafia providing a murky underbelly to the officially sanctioned economic players in the formal economy.

Central Asia has a long-standing concern that, despite the structure of regional co-operation, Russia will seek to force independent states back under its control. This concern increases the need to develop quickly. But in 2002, as oil prices begin to fall, foreign companies begin to scale back their investment plans. Evacuation routes to the north, south, and east are indefinitely postponed. The US drags its heels on Iran, delaying pipeline projects southwards. As the Asian crisis continues, dampening Asian energy demand, and with the possibility of even lower oil prices, the Chinese route also faces funding problems. In spite of these difficulties, the Caspian Pipeline Consortium (CPC) route opens in 2002, and the pipeline route from Central Asia across the Caspian through now peaceful Azerbaijan to Ceyhan becomes fully operational in 2004. Evacuation through the Russian pipeline system remains the obvious first choice, while a pro-active US policy backs the opening of the evacuation route through Turkey.

The delays to investment plans put a dampener on regional growth prospects after 2002. Initially, though, these delays are a blessing in disguise – they apply deflationary brakes and provide a strong incentive to maximise efficiency and returns from the projects that are in place. By 2005, with the prospect of an unrelenting low oil price, growth begins to falter, and storm clouds of dissent mass on the horizon. Resource development has yet to benefit most people, and latent regional conflicts, particularly between Uzbekistan and Kyrgyzstan, are in danger of flaring up again.

Those political regimes with strong executives respond by clamping down on dissent, and encouraging a regional nostalgia for the good old Soviet-style days of order and predictability. This clampdown is encouraged by those who have benefited from growth and seek to defend their privileges. Outside powers, also, have much at stake, and back the regimes in power. These regimes are able to stifle dissent very effectively and to re-establish order. Despite the lack of political freedom, economic reforms enable a modest but sustainable 4% to 5% per year GDP growth, beginning in 2010.

But the autocratic regimes that lead this austere style of development lack the political will to put in place the fundamental changes Central Asia needs if it is to pull itself up under a low oil-price regime. Even so, by 2015, the economy has been steered into a position that might allow a relaxation of controls to follow next.

Meanwhile, on the western side of the Caspian, the South Caucasus has been enjoying appreciably better growth, in large part because the main thrust of Caspian oil evacuation has continued westwards after 2005. Around that time, too, Azerbaijan begins to respond to the forces of TINA, recognising that this is the only way to connect with world markets and thus to continue growth. The new president cleans up most of the various regional mafia, in some cases integrating them into the economy by making their businesses more respectable and orderly. These newly cleansed 'businessmen' buy their way into the political process and protect themselves through formal legislative sanctions. As the process of internal reform takes shape, they form consortia with more respectable foreign partners (though at a price for the oil majors), and most business activity becomes regularised and more reputable. By 2020, prospects in the South Caucasus are reasonably promising – certainly more so than the prospects offered by the slow growth and austere politics prevailing on the Kazakh side of the Caspian.

People Power – Roller-Coaster Ride into the Sands

This story begins as Central Asians and South Caucasians "plunge into the sea of commerce." But the rent-seeking *arrivistes* who have bubbled to the top fail to become a genuine propelling force of regional development, and recession eventually pricks the regional balloon.

The Caspian Region is set alight in 1999 by a series of big energy discoveries, off- and onshore, in Kazakhstan. Major players jostle to get in on the game. Meanwhile, in Uzbekistan, Karimov, not wishing to be left out, also encourages foreign energy participation.

By 2003, Asian economies are recovering, and oil prices are relatively strong. Outside pressures build to open up evacuation routes all round: southwards through Iran; eastwards through China to the Pacific coast; and westwards through to Ceyhan. Turkmenistan also begins work on a line running off the Iran route to supply the Pakistan and Indian markets.

As money floods in, economic growth races along, with politicians dispensing favours and Byzantine administrations issuing innumerable authorisations to individuals in private sector businesses. In Uzbekistan, organised crime funds government social projects in return for protection. 'Dutch disease' (overvalued currencies, overdependence on energy resource exploitation for revenues, excessive expectations) spreads virulently throughout Central Asia.

The regimes in the South Caucasus also pick up. Robber barons emerge as local heroes, embodying the native entrepreneurial tradition. They swim in an anarcho-capitalist sea that knows no bounds and set up business consortia with covert mafia involvement. Returns are stashed away in havens abroad. The oil majors drag their heels, reluctant to join these webs. But because the oil has to get out, co-operation is bought using western traders and Russian finance groups as well as smaller oil companies less squeamish about their alliances.

Capitalist rent-seekers fuel a speculative property-driven boom, marked by conspicuous consumption and rampant corruption. As the oil revenues flow in, government officials feel no pressure to embark on fiscal reform. A dark shadow begins to form as the gulf widens between the winners – those with the inside track to office holders in the ruling regimes – and everyone else. Increasingly widespread poverty in rural areas fuels animosity towards the urban glitz. As the floating population of migrants in the towns grows larger, violent protests increase.

A sharp fall in the oil price in 2004 proves catastrophic, deflating the bubble and threatening to topple ruling regimes throughout Central Asia. Pipeline investors are left uncomfortably exposed just at the point that the market collapses. Regional growth plummets from a high of 8-10% per year in 2003-2004, to nothing in 2005. The region moves from boom to massive bust, and begins to drift into chaos and fragmentation. In reaction to the sharp recession, extreme nationalism rears its head, fracturing the region, as military forces encourage local conflicts. Central Asian states have long-running disputes with each other that do not take much to ignite. Nationalist sympathies, squabbles over energy resources, movements of nomadic people across national borders, Russian and great powers 'meddling' – all these prey like vultures on the increasingly slim pickings from resource development. Losing patience with what they perceive to be foreign meddling, the Uzbeks grow aggressively nationalist, replacing their authoritarian president with a stronger dictator, who closes the borders. The newly formed military powers of these countries seek to focus attention on 'external threats' and clamp down further; elsewhere, corruption accelerates, and parts of the region, in effect, become lawless.

As foreign companies retrench, rickety regional governments panic and strike ruthlessly against domestic dissent, all the while continuing to squeeze the last drop from foreign investors. Localised conflicts and growing unrest in the regions

begin to disrupt export pipelines, especially those under construction. If they wish to carry on, companies must strike deals with local gangs whose tentacles are beginning to curl around critical parts of the region. The costs and uncertainties of evacuation soar.

The South Caucasus turns into a situation of every-man-for-himself. Office holders with increasingly limited shelf lives, seek to tighten the screws even more drastically in order to rake in more for themselves during the short time they are in office. The mental horizons of private businessmen extend no further than their own shop-fronts. Relations with Russia grow increasingly sour, particularly in Dagestan, a semi-autonomous Russian province which sits astride the pipeline route out of Azerbaijan. As strains intensify in Azerbaijan, Russian policy becomes increasingly interventionist, suppressing Dagestan and moving troops into Armenia – a move that sends a warning signal to Kazakhstan.

Meanwhile, on the eastern side of the Caspian, Uzbekistan, reviving the Greater Turkestan vision, takes over Tajikistan in 2006. Immediately following the take-over, however, Uzbekistan becomes embroiled in a long-running feud with Turkmenistan, a feud that weakens both countries, to the advantage of Kazakhstan. Here, too, relations with Russia worsen. Safety concerns lead to stoppages on the Russian section of the CPC pipeline; and in 2007, the Russians simply decide to close the pipeline. By 2008, the region has stagnated into a 'white space' of no concern to the outside world. In 2010, the President of Kazakhstan dies unexpectedly, unleashing a bitter internecine struggle for power. The northern provinces of Kazakhstan, with their larger share of hydrocarbon resources, seize the moment and declare independence. Russia simply absorbs the secessionist provinces. Kazakhstan drifts into isolated chaos.

In 2012, a new strong man seizes power in Kazakhstan, openly acknowledging the country's straitened circumstances, while using the late President and his coterie as a convenient peg on which to hang all the regime's ills. Externally, he turns to China to counterbalance an increasingly powerful Russia. Internally, Kazakhstan enters a period of ruthless suppression.

By 2020, Kazakhstan appears to be muddling along, though it is severely weakened. Uzbekistan has become a more hard-line fundamentalist state, but remains a key player in the region, though marginalised in the wider world; additionally, given the problems in Kazakhstan, the nomadic southern Kazakhs are attracted to Uzbekistan. Turkmenistan survives by selling gas to Turkey, maintaining modest growth, and offering a glimmer of hope to the long-suffering peoples of the region – the hope that if only they can co-ordinate their actions for their mutual long-term self-interest, there is an alternative to stagnant GDP growth rates and perhaps something other than a grim, uncertain future.

Scenario Overview

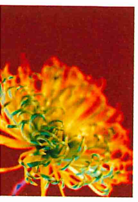
The Current Miasma

- Suspicion of TINA – fear of exploitation.
- Kazakhstan best placed to exploit TINA. But the consensus in favour of reform is increasingly fragile, and rising expectations threaten to exceed progress achieved.
- Uzbekistan and Turkmenistan remain closed economies and increasingly divided societies. Turkmenistan needs to realise its oil and gas potential.
- The South Caucasus (Azerbaijan, Armenia, Georgia) drifts along with localised conflicts and Russian interference. But an unorthodox, freewheeling, private business sector is thriving. The potential exists for an integrated approach to energy transport.

The New Game

- Early off-shore oil success kick-starts regional growth, in which Russia has a stake.
- Uzbekistan emerges as the regional exemplar because of its long-term vision; its authoritarian government sets the framework for gradual reform, and the Uzbek example is copied by others. Regional economies begin to stir.
- Economic alliance between Kazakhstan, Uzbekistan, and Kyrgyzstan, initially to co-ordinate gas evacuation, is broadened to cover regional infrastructure and trade.
- In the South Caucasus, agreement on Karabakh brings together US and Russian interests in support of regional security, and a westward pull to evacuation of Caspian energy resources emerges.
- But falling oil prices from 2002 leads to a cut-back in foreign investment plans. Evacuation routes to the north, south, and east are indefinitely postponed.
- Initially, investment cut-backs help to cool overheating economies, to provide an incentive to maximise returns, and to improve efficiency.
- But an unrelenting low oil price eventually undermines regional growth. Domestic dissent begins to rumble, and latent regional conflicts (especially between Uzbekistan and Kyrgyzstan) flare up.

- Autocratic political regimes, with external backing, re-establish order. Modest but sustained economic growth resumes from 2010.
- Meanwhile, the westward thrust to Caspian oil evacuation continues, keeping better growth prospects for the South Caucasus. Internal reform cleans up the regional business mafia, and market activity becomes regularised and more reputable.



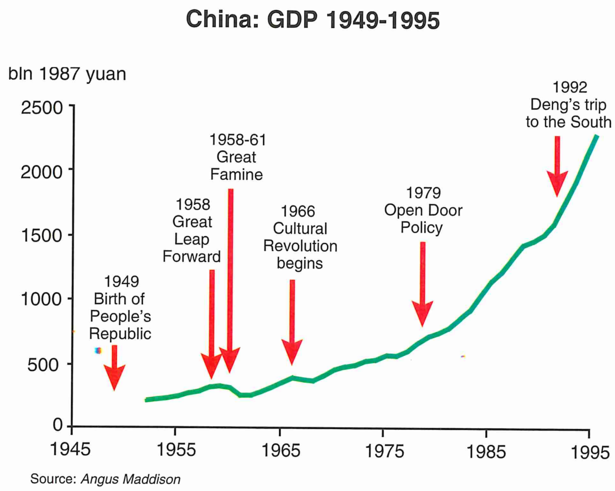
People Power

- Big energy discoveries off- and onshore Kazakhstan in 1999 bring a dash for growth. Outside energy pressures build to open up evacuation routes all round. Money floods in, encouraging corruption, profligacy, organised crime, and 'Dutch disease'.
- Anarcho-capitalism in the South Caucasus – robber barons join with western traders and Russian finance groups.
- Fiscal reform delayed; widening gulf between winners (with an inside track to office holders in government) and losers, and also between urban areas (with a large migrant population) and rural areas.
- A fall in the oil price in 2004 deflates the bubble, leaving investors stranded. Regional growth falls to zero in 2005. Growing unrest. Boom turns to bust.
- Central Asia drifts into chaos and fragmentation with localised conflicts, regional unrest, disruption of export pipelines, and a squeeze on foreign investors.
- Barricades mentality in the South Caucasus; Russia becomes increasingly interventionist.
- Regional feuds in Central Asia (particularly between Uzbekistan, Tajikistan, and Turkmenistan), and the break-up of Kazakhstan (the northern provinces, with their hydrocarbon resources, linking with Russia), lead the eastern side of the Caspian to stagnate into a 'white space' of no concern to the outside world.
- As Kazakhstan continues its inexorable decline, Uzbekistan crashes into a fundamentalist vortex, while Turkmenistan manages to hang together through gas sales to Turkey.

China

The Lessons of History

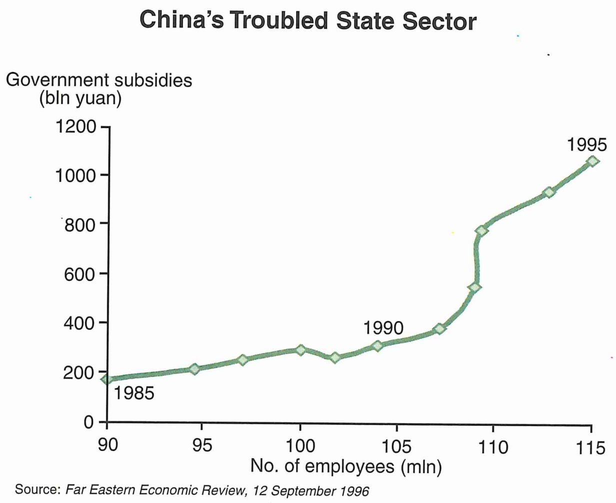
China's search for modernity over the past century has been marked by dramatic changes and sharp alternations of policy and governing practice. These changes are partly the result of China learning to respond to the shocks that have hit it again and again. Each shock has caused immense pain, propelling the country in a completely new direction, without any cue from what has gone before. The collapse of the Qing autocracy resulted in anarchy, followed by a form of weak republicanism; the Kuomintang revival of the 1930s was succeeded by the communist regime of 1949; the Great Leap Forward plunged China into mass famine, eventually corrected by central planning and bureaucratic rule; the mass movement of the Cultural Revolution was succeeded by structural reforms and the introduction of capitalist practices; and the challenge of Tiananmen was met with a burst of economic liberalisation.



This last shift moved China into a completely unprecedented era of economic growth – which, while always over-estimated in official Chinese statistics, is likely to continue in response to the forces of TINA. But given China's unpredictable lurches in the past, no predestined path can be mapped out with certainty

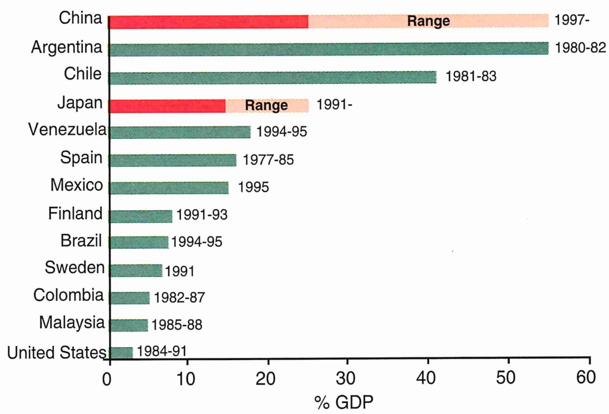
The Gamble of Reform

China's new three-year programme aims explicitly at free market reforms, and has in its sights the big problems, previously avoided, of reforming state enterprises and the financial sector and of down-sizing the civil service by closing inefficient companies and throwing out workers and redundant bureaucrats. This move in turn is driven by the need to prevent a meltdown of the financial system, itself grossly overextended by bad loans to state companies which, while demanding a large chunk of financial resources, earn only 1% of China's total industrial profits. At the same time, the ruling regime is acutely aware that its legitimacy depends on keeping up the momentum of growth to at least 8% per year for the next three years, at a time when domestic economic downturn appears to be conspiring with regional economic crisis to bring growth below the level at which the regime feels politically secure. If growth falters, will the leadership retain its nerve and stay the course of economic reform?



Even though China's new leadership is more open-minded and technocratic than bureaucratic, there are increasing rumbles of discontent from the dispossessed. Social security support is practically non-existent. In the past, banks have been pushed by government to lend to state-owned enterprises, who were otherwise unable to finance themselves. But now, as economic reforms are put into place, these enterprises are increasingly uncompetitive. The triangle of debt formed by inefficient state-owned enterprises, their suppliers, and financial institutions strapped by non-performing loans to these enterprises, poses an enormous threat: the collapse of one leg of this three-legged stool would undermine the entire system. Already, the acknowledged bad debts of banks amount to 25% of GDP (covered by loan loss reserves of well under 1% of total loans outstanding); other estimates of non-performing loans range all the way up to 70% of GDP. And state-owned enterprises, for their part, need a debt write-off equal to 25% of GDP. Compounding this threat is the danger of a real estate price collapse (Shanghai is building in one decade more office space than Hong Kong built in four), which would involve China's over-extended banks and other financial institutions. Will China respond by expanding the scope of the market? Or, in the face of problems of such magnitude, will it revert to the old solution of government support?

Cost of Banking Crises
(Bailing Out Failed Financial Institutions)

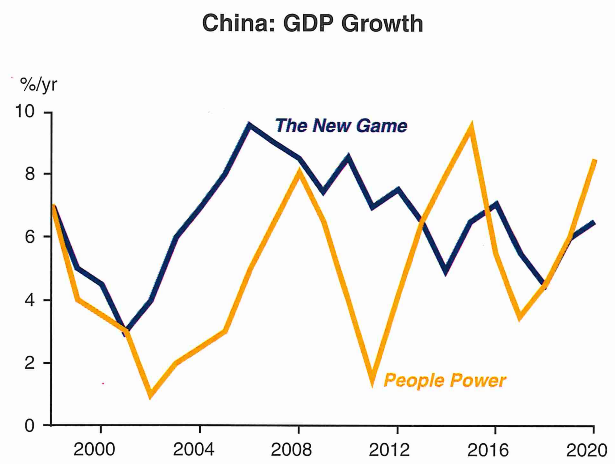


Source: *World Bank*

China on the Brink

It is possible to paint a dark future for China in which reactionary political forces feel threatened by change, to the point of cracking down on reform, as they have before, triggering open confrontation or even political breakdown. But this is unlikely. Chinese society has a deeply instinctive fear of the *luan*, or chaos, that would result from civil disorder and a collapse of state control.

Under any scenario, however, the current path of development – trying to liberalise the economy without liberalising the political system – is unsustainable. The past two decades of growth have papered over the increasingly pressing economic problems of inefficient production, idle capacity, and bad debts. These problems are now surging to the surface, threatening to overwhelm the progress that has been made and potentially creating dire political consequences. Yet the government is hesitant to bite the bullet of radical reform, which could throw millions more redundant employees onto the streets and precipitate social unrest.



China will go in one of two directions: either it will grasp the scale of the problems it faces right from the beginning and devise a broad-based comprehensive strategy to deal with them (***The New Game***); or else government will be sidelined, as quick-moving flexibility and popular ingenuity drive what are, at times, brilliantly successful spurts of growth (***People Power***).

In the former case, the point is grasped early on that a rules-based system gives institutions the ability to anticipate and to adjust relatively smoothly, as events play out—a story of the maturing of governance and a belated coming to terms with the challenge of modernisation. In the latter, a rules-based system emerges after a long time-lag, and almost by default. But at the end of the day, whichever story we are in, China learns that only a rules-based system can ensure long-term political and economic stability. These two modes of learning set the logic for our China scenarios.

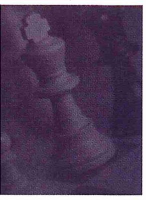
The New Game

In ***The New Game***, China's leadership grasps early on that a rules-based system gives institutions the ability to anticipate and to adjust relatively smoothly, as events play out. This is a world in which governance in China matures and at last comes to terms with the challenge of modernisation.

The challenge posed by ***The New Game*** is how to extend economic reform to embrace political reform and social change while not losing control. China's leadership must provide the education, health, and infrastructure investment necessary for China's global competitiveness, while also putting in place social welfare programmes for the unemployed and elderly so as to keep the peace while society undergoes wrenching change.

The story begins with the implementation of a programme of broad-based reform. State enterprises are restructured through privatisation and take-overs, state assets sold off, and the government bureaucracy drastically slimmed down. Social welfare reforms are also brought in to pick up the casualties of change, the unemployed, and the elderly, while other government measures encourage the building of low-cost housing and accelerate worker retraining into new economic activities, including the rapidly expanding services sector. The banking sector is reformed, and capital markets are encouraged to expand while still being strictly regulated.

A whirlwind of change is unleashed, inducing a shake-out in the industrial sector, with weak firms (overwhelmingly from the state sector) going to the wall, while the strong prove surprisingly durable. Higher value-added production survives, and the establishment of lending on a commercial basis also favours the strong. The ruling regime quickly arrests the present downward economic spiral, and growth flattens out to a precarious 5% in 1999. But then the economy returns to a steady, if not spectacular, rate of growth that reaches 8% by 2006. Central control is maintained, and the regions go along with the agenda unfolded from the centre. The basis is laid for a resumption of sustained long-term growth.



The government's programme of economic reform is noteworthy in that it initially targets housing in order to stimulate economic growth, reconfigure the financial sector, and aid the withdrawal of the state from the direct provision of essential needs. Financial reform requires a costly recapitalisation and commercialisation of the banking system, which is paid for through raising tax revenues. But China emerges from this painful process with a sounder financial sector and a continued high level of domestic savings.

Only the private sector, and not the state-owned enterprises or the more collectivist township and village enterprises, has the entrepreneurial ability to create jobs at a rate sufficient to respond to the increasing numbers of unemployed. But the spread of private ownership and the growth of equity stakes taken by foreign companies who buy into state privatisations prove to have far-reaching and unforeseen consequences. The full growth-generating benefits of entrepreneurship can be secured only if the government protects property rights with a reliable system of laws and courts. By clearly upholding the legal basis of private property and private capital, and by keeping arbitrary political depredations at bay, the new private sector is encouraged to invest over the long-term, rather than to consume its gains in a frenzy of expense-account dissipation. As a result, the moral climate also improves, as society sees fewer "flies coming in through the open window" of economic liberalisation.

Removing communist party guidance from the legal system eventually results in a genuine reform that includes an independent process of litigation and the arbitration of economic disputes. As the judiciary extends its scope, and as party influence on its workings fades, the rule of law emerges as a consequence of economic pressures.

However, these judicial reforms doom the communist system irrevocably, both as a significant economic influence and as a decisive political actor. The fate of the PRI in Mexico foreshadows what is to come in China. For the first time in China, modernisation creates a real economic pluralism. Full legal protection for property rights secures the rise of entities with independent power bases –

companies and individuals not in any way beholden to the centre, without any obligation to uphold the official line on any issue, and indeed, with agendas of their own, including new socio-political and economic demands. The rise of a private sector, which regards political controls as inimical to the pursuit of profit, unravels the whole system of social control on which the communist party secured its political pre-eminence. The dilemma for the ruling regime is that its only *raison d'être* is to deliver economic success; yet to do so, it grows increasingly dependent on a society and a private sector with a will of its own.

In an attempt to recover lost ground and to find a new basis of legitimacy, China's leadership sponsors a political transition to a more democratic system, with the understanding that the regime can improve its chances of survival by giving up a measure of direct control and coercion. The National People's Congress (already showing independent tendencies in the late 1990s) is given legislative teeth in 2004, and a full-time Standing Committee is set up to initiate new legislation. The civil service is increasingly professionalised, and personnel appointments decentralised, strengthening the move throughout China away from political favouritism towards a more meritocratic system.

In the rural sector, state institutions, too weak to supervise and regulate the farmers, can no longer ensure basic grain production. Once again, the government acts to solve the problem by extending property rights to encourage farmers to make extensive long-term investments in their land. As a result, output per hectare grows dramatically, and more land is brought under cultivation, reversing the previous declining trend.

Meanwhile, China's foreign policy has been instinctively pragmatic, firmly grounded in a *realpolitik* view of the world. Its security concerns are focused inland as it attempts to preserve control along the Central Asian border in order to ensure uninterrupted transport of energy resources eastwards to the main consuming regions. China extends its influence in Central Asia, at the expense of Russia, while establishing itself as a stabilising force within the north-east Asian region. Taiwan's increasingly well-established *de facto* separation from China, as

the island's politics become more and more responsive to the wishes of its majority, create concern within the Chinese leadership. And hard-line elements within that leadership argue from time to time for a 'quick result' against Taiwan. But China learns that a return to more confrontational policies carries an economic price, in terms of critical external perceptions and a slowing down of inward investment and financial flows – and the status quo eventually prevails.

But there is another side to the series of reforms initiated in 1998. The official slogan for state enterprise reform at that time had been "Retain the big, let go of the small." Some of the giant state-controlled conglomerates that were consequently built up as 'national champions', in emulation of the Korean *chaebols* of the time, began to expand recklessly, without fear of the consequences, introducing a moral hazard issue in the way they operated. By the beginning of the new century, it is clear that the top-down approach to development is too costly for the increasingly globalised economy. In addition, in its anxiety to establish safety nets to meet potential dissent growing from rising unemployment, the ruling regime has succumbed to too many pleas for special favours, setting up a system that is unwieldy, expensive, and ridden with a host of hidden inefficiencies.

By 2010, these hidden inefficiencies begin to make themselves felt, as the economy moves into recession. The large state-controlled business groups become increasingly resented for their privileged access to investment funds and government contracts. As the inefficiencies of these businesses are exposed, pressures on government mount. A new administration takes office and begins relatively quickly to break up the giant financial-industrial groups, opening up economic space for the new breed of high-technology entrepreneurs to flourish. It is a measure of how responsive the government is to the pressures within and without that many of the most successful high-tech firms that benefit from the new economic measures are those with close links to Taiwanese firms. At the same time, the government also recognises the many interest groups that have been spawned by economic and social change and begins a dialogue with them as legitimate political actors. By 2020, the state has set the seal on its reform process by formally repudiating the legacy of Mao, by removing communist party groups from government, and by acknowledging the debt China owes to the technocrats for overseeing the growth of the past two decades.

People Power

People Power is a world of radical change driven by popular unrest, while government just muddles along—the time of the 'Muddle Kingdom', as some commentators put it. The Millennium Bangs around the turn of the century hit China hard, weakening government control, but, at the same time, opening up space for the assertion of popular interests.

The time of the 'Muddle Kingdom' is both the best of times and the worst of times. There is a genuine fizz of excitement, as many experiments in governance and economic management are tried; but there is also immense social misery as the triple hammer blows of social dislocation, burgeoning unemployment, and economic decline strike home. As government grows weaker, inflation soars to 25%. In 2001, the banking system cracks when an attempt to limit customer withdrawals backfires, and many customers stop depositing their funds and begin withdrawing what they can. The Yuan collapses from 8.27 to the dollar in 1998 to 20 by the beginning of 2005. Official Chinese growth figures plummet to zero, but these figures – never quite reliable – become increasingly irrelevant, because they measure only the official economy.

In an attempt to put a lid on soaring unemployment, the government liberalises the economy by opening up new areas to foreign direct investment and by shrinking the centralised control of the state. The market begins to flourish as government downsizes dramatically, withdraws from the direct supply of housing and other basic goods, and breaks up state monopolies. State-owned enterprises lay off 60 million workers in three years. Reform thrusts responsibility into the hands of individuals at the expense of the state, which abdicates accountability. Educated people, with their latent distrust of government, feel particularly encouraged to mount political challenges against the ruling regime. Power passes

to the people, while the state, by hammering the last nail into the coffin of central control, unwittingly consigns itself to ultimate irrelevance.

Meanwhile, in the mud of economic turmoil and collapse, the seeds of a native Chinese entrepreneurial capitalism continue to germinate. This native capitalism is heterogeneous, not conformist; it is Taoist, Buddhist, and folklore-animated, rather than Confucian; it is built on closely linked networks, whose strength derives from a code of strict reciprocity; and it is eminently practical, specific, and opportunistic. It resurrects within the domestic Chinese context that old network of Overseas Chinese capitalism that had been such a dynamic force for growth within the Asian region before becoming corrupted by being brought into the state structures of regional governments (as business sought special favours and protection from politicians in return for economic gain in Indonesia and elsewhere). And it spreads from the southern coastal regions northwards, waxing as the power of the state wanes. Those parts of China stuffed with redundant bureaucrats or bankrupt state-owned enterprises are left to wither on the vine, while other areas, free of these impediments, are up and running. Guangdong sets the pace, and its maxim – "go on green, speed on yellow, find a way to go around on red" – becomes the unofficial national motto. The *gangtai* phenomenon prevails, with the peripheral Greater China regions of Hong Kong and Taiwan setting the economic and cultural agenda for the rest of the country.

As authoritarianism recedes, and the influence of interfering state and party organisations (the 'mothers-in-law') fades, a form of governance by negotiation and consensus emerges. In this new form—'the Asian way' – people deal through networks with those whom they know, buying and selling favours and receiving authorisations to carry out particular activities. Local administrations and provincial authorities get in on the act, and seek to capture the fruits of economic success for their own communities. This is a market-based system which works through bargaining, consultation, and persuasion.

Even though it is extremely decentralised, the Chinese state still coheres. The centre helps to mediate differences among local and provincial administrations, and political leaders at the centre retain tangible local influence. At the same time, the growing economy encourages the regions to try to influence the centre rather than to attempt a break-off. Informal networks of people not only express criticism and political dissent but also serve to channel it. By 2010, a form of rough-and-ready democracy has emerged at the local level.

With the 'capitalist-roaders' now in the driver's seat, China recovers from recession in spectacular style, and the economy thrives. Yet all is not well in what seems to many Chinese to be the best of all possible worlds. Ultimately, such a system of devolved governance fails a series of key tests – in reforming agriculture, as the requirements of industrialisation encroach on arable land; in meeting the growing demand for energy, which requires the laying of an extensive pipeline infrastructure reaching from the Pacific coast into Central Asia; and in reducing environmental pollution (which is rising sharply) where NIMBYism is prevalent. Large infrastructural and environmental abatement projects prove difficult to put together. Growing environmental and energy supply problems cloud the bright economic prospects, unleashing a new series of shocks from 2008 onwards, with supply bottlenecks intensifying, and air and water pollution causing increasingly serious and widespread health problems. And some of the old problems continue to worsen – income gaps between rural and urban areas, for instance, have been growing in spectacular fashion since 1992, accompanied by a tidal wave of urban crime, which shows no sign of abating.

Awareness grows that the centre needs to be reconstituted in a form that more directly serves the regions, but without resurrecting the old barriers against individual enterprise. At the same time, there is a new political awakening – a 'Beijing Spring' – in which people from all parts of the country, as well as the leaders themselves, put forth economically based arguments for a broader democracy. Libertarian ideas are discussed with increasing fervour, initially within think-tanks in Beijing, then spreading more widely through the news media. As these arguments grow more coherent and appealing, debate about political reform becomes more open and more heated.

Beijing Spring, 1998

"A society that does not recognise that each individual has values of his own which he is entitled to follow can have no respect for the dignity of the individual and cannot really know freedom."

Friedrich von Hayek, The Constitution of Liberty

In the spring of 1998, an extraordinary event took place in Beijing. A group of reformers took advantage of the lifting of the official ban on Hayek's *The Constitution of Liberty*, and met to discuss the previously illicit text. With growing excitement, they seized on its key message – that a government of office-holders controls society through personal will and command, whereas a government of laws exercises its authority through a system of general rules. And it is only through the rule of law – which has to be fought for because it is always under threat – that liberty becomes possible.

The timing was propitious. A new regime had taken power, seemingly confident in its abilities. Premier Zhu Rongji was displaying a refreshingly open political style, appearing even to endorse the principle of elections. And President Jiang Zemin, seeing how the wind was now blowing, was quick to condemn Asian governments as too 'feudal'.

Rather than closet themselves in ivory tower think-tanks, the new independent-minded scholars have moved to stir the public mood by writing political tracts aimed at all audiences. They express impatience, even with the new order, which they see as still possessed of a top-down mind-set. Instead of allowing Zhu to dictate the pace of change, they want to push for change themselves, beginning with the individual.

The new ideas are beginning to spread to the mass media across China, and even to spill over into the public debate. And a movement has been formed – *ziyou pai*, or the 'Liberal Party' – that calls for elections, an independent legal system, and respect for individual rights. These independent thinkers, entering uncharted waters in China, find in Hayek a set of principles from which to criticise the *ancien régime* and to fashion something new. And they empathise with Hayek's belief that those who have experienced totalitarian regimes have a far sharper sense of the conditions and values of a free society than those who are more fortunately born.

"Another colleague had also prepared a paper arguing that the 'middle way' was the pragmatic path for the Conservative party to take, avoiding the extremes of Left and Right. Before he had finished speaking to his paper, the new Party Leader reached into her briefcase and took out a book. It was Friedrich von Hayek's *The Constitution of Liberty*. Interrupting our pragmatist, she held the book up for all of us to see. 'This,' she said sternly, 'is what we believe,' and banged Hayek down on the table."

Ranelagh, Thatcher's People

"The things Hayek talked about are exactly what China is going through now."

Yu Dazhing, Chinese academic, at the 1998 Beijing Conference to discuss Hayek's The Constitution of Liberty

In 2012, a convention of the states is called to work out a constitution for the new Federal Chinese Republic. Taiwan attends in an observer capacity, having achieved associate status. Federalism in China emerges as a consequence of an already devolved power, with regions overwhelmingly dependent on the outside world, but seeing the need for an effective centre in order for them to hold their own in the transnational networks in which they are inextricably interlinked. A rules-based system supporting the rights of the individual is put in place, setting the order for the economic recovery that takes off and runs to the end of the decade.

Europe in 1998 — *In EU and EMU* — *In EU, outside EMU* — *EU entry in progress* — *EU entry on hold*

Euroland

The New Game

In ***The New Game***, the successful introduction of the Euro in 1999 lays the foundation for an era of steady, non-inflationary growth and structural reforms. The disciplines foreseen under the Stability Pact work, and the new European Central Bank (ECB) manages to establish credibility. Under the new consensus, labour markets are deregulated, and the welfare system is restructured, resulting in a gradual decline in unemployment levels. Following its general election, the UK joins the European Monetary Union (EMU) in 2002.

By 2005, Europe is beginning to develop a 'third way' which combines flexible markets with effective social protection for all. Tax rates decline, although not to the level of those in the US, and social security systems are restructured so as to provide stronger incentives to work. 'Blairism' – 'capitalism with a heart', or 'socialism with a head' – dominates the search for an 'intelligent Social Chapter'.

Throughout the European Union (EU), pressures are at work to create community-wide rules ranging from taxation to regulation of health, safety, environment, and privacy. Energy markets are progressively deregulated, particularly for gas and power.

Around Europe, countries in the East and South try to benefit from trade and finance with Euroland. A number of countries, including the Baltic states, move towards formal EU accession. Others establish currency boards tied to the Euro or join the Euro-bloc itself.

European foreign policy is successful in cementing relations with Russia and helping it with the transition to a functioning market economy. European help for Russia during its 2002 currency crisis is much appreciated and leads to closer co-operation and increased trade. Towards the end of 2009, the Russian currency begins to be linked to the Euro.

A by-product of the closer European-Russian relationship is the joint approach taken towards threats arising from radical Mid-Eastern politics. Together, Russia and the EU tighten controls of arms sales, improve intelligence, and co-operate to monitor movements of suspected terrorists. In addition, Europe opens itself up to limited immigration, a move that provides job opportunities for those in various North African and Middle Eastern countries.

Meanwhile, Europe's population is ageing rapidly. Around the turn of the century, many predict a pension fund crisis. But the problems are gradually addressed through a combined approach of raising the retirement age, privatising pensions, and maintaining tax rates at relatively high levels compared to the US. The move to defined contribution schemes across Europe reinforces the emerging equity culture. European equity markets take off. In addition, the world of ***The New Game*** makes it possible for ageing Europeans to invest in emerging markets and live off the returns of these investments. Europe becomes an active supporter of free financial flows and open markets world-wide.

The relatively high tax rates that accompany the greying of Europe – and perhaps the greying itself – are an incentive for many younger people to study and seek work outside the continent. With its ageing population, Europe becomes a bit like Florida, with service workers immigrating from Eastern and Southern areas around Europe, eager to find work in the newly flexible labour markets of the continent.

Because Europe cares for its environment and cultural heritage, tourism becomes even more important as a source of income. Many new theme parks are constructed, and new forms of entertainment emerge. The first of several Italian medieval cities is concessioned to a private consortium of Disney and Lyonnaise des Eaux. Real estate markets in the sunny parts of Europe continue to boom.

The success of Europe and worries about exchange rate variability vis-à-vis the dollar lead the ECB and the US Fed to move towards harmonisation of monetary policy. This greater harmonisation, in turn, strengthens the emerging world system of lender of last resort.

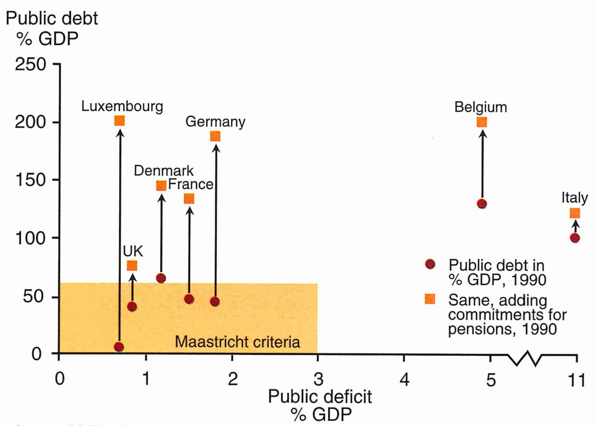
People Power

In 1999, the Euro is successfully introduced, but initial optimism fades as the upturn in the business cycle in European economies turns out to be short-lived.

The 'Millennium Bangs' – the stock market crash in the US, coupled with a banking crisis in Japan – result in currency inflows into Europe and a consequent rise in European unemployment to 17%. Europe's people are getting older, and its squabbling politicians seem unable to come up with acceptable solutions to the lengthening list of problems. State-enterprise employees resist deregulation and privatisation. Governments use 'privatisation' as a form of off-balance-sheet funding without seriously shifting risk to the private sector and without truly deregulating markets. Older people support the status quo in an attempt to preserve their entitlements, but the severe unemployment problems of the young create friction between age groups. Neo-nazis and other 'antis' create a climate of unrest.

Meanwhile, growth is lagging because of continuing labour market rigidity and relatively strong safety nets. High tax rates encourage tax evasion. The black economy booms. In Germany, this black economy – estimated at 15% of GDP in the late 1990s – rises to over 20% by 2005.

What Unfunded Pensions Do to Maastricht



Source: *CS First Boston*

By 2010 it is clear that pension reform is impossible. The old do not want to give up their entitlements, and the young do not want to pay the extra taxes required during the transition to a private pension system. The member states of Euroland continue to increase their public borrowing. Yet, to counteract inflationary pressures from fiscal laxity, the ECB tightens monetary policy in ways reminiscent of the Fed during the years of Reaganomics. Thus, Europe has barely recovered from the Millennium Bangs when the ECB policy of high interest rates deflates any hope for sustained recovery. Unemployment rates shoot up again, reaching a European average of 19%.

In an age of increasing use of referenda and electronic voting, disenchanted Europeans support one populist policy after another, abandoning each as it becomes clear that the policy is not producing quick results. It is an age of populists and demagogues in politics. France in particular is shaken by repeated strikes, with truckers especially effective in disrupting European trade and tourism.

In 2010, under continuous fiscal pressures, EU governments make severe cuts in defence spending, infrastructure (especially roads), and education in an attempt to preserve at least a minimum safety net of pensions and health benefits.

In addition, under increasing populist pressure, the ECB allows the money supply to increase. The Euro weakens, and markets reflect doubt about the future value of the currency. In an age of easy cross-border transfer of electronic funds, people shift to more stable currencies. Tax evasion increases, with Russia becoming a major tax haven and off-shore transaction settlement centre. Meanwhile, many old people do not receive the entitlements they expected. Cross-border investment in emerging markets turns out to have been too risky, and returns in Europe too low. Like Soviet citizens after the fall of communism, many retirees are forced back into work.

As the ability of traditional authorities to solve core problems seems to fade, Europe becomes a continent of regions and new communities. Some of the sub-regions effectively start to opt out of the system. Competing currencies, especially the dollar, and even some private money, become widespread in many communities. A number of smaller firms ignore labour market regulation, especially in regions at the fringes of Europe.

Across the continent, while the vanishing credibility of politicians and their institutions induces a sense of despair in older people and other vulnerable groups, another kind of response gathers force. The European education system still remains perhaps the best in the world, and the highly-qualified young begin in increasing numbers to take responsibility for their futures, simply ignoring dysfunctional regulations where necessary. New biotechnology labs spring up across Europe, networking to analyse the data. The new generation of parallel processing computers requires highly advanced software techniques, and mathematically talented and educated entrepreneurs make their fortunes, beginning to build some of the fastest-growing companies in the world. Gradually, some of the more enlightened governments begin to learn that their future depends on the loosening of controls in order to encourage such free

spirits. The states around the Baltic Sea, parts of Lombardy and the Rhône Valley, and regions in northern and southern Germany lead the way.

Towards the end of the scenario period, hope returns to Europe as a result of these islands of progress, which advance despite gridlock in official institutions. 'Official harmonisation' is seen to have been illusory – it stifled progress rather than supporting it. Without this lid, individual companies, governments, and entrepreneurs can make progress at their own pace and in their own way. The road to the future may be bumpy, but at least now it's an open road.

The Middle East

Middle Eastern economies have run into various cul-de-sacs over the years. Nationalist and socialist experiments such as Nasser's Egypt have failed. Regional strongmen of whatever persuasion have not been able to match brutality with economic success. Islamic regimes have been disappointing. And oil windfalls have proved to be illusory for sustained economic growth. Even those oil-rich countries still enjoying a good life are overshadowed by worries about 'life after oil'.

Hope is now seen to lie in fairly orthodox economic policies, such as the ones attempted by Egypt, Jordan, Lebanon, Morocco, Tunisia, and Turkey. Lack of massive amounts of oil is gradually coming to be recognised as a blessing because it forces people and their governments to work hard and exercise care. In the late 1990s these orthodox economies show higher growth rates than elsewhere in the region.

'Islamic Fundamentalism'

The term 'Islamic fundamentalism' was coined following the 1979 Iranian revolution as a way to describe and explain the resurgence of Islam as a political force. Gradually, it has also become a commonly used journalistic buzzword for terrorism and extremism. Most Muslims find the term both meaningless and derogatory. Literally, a fundamentalist in Islam is one who follows religion's precepts to the letter, a duty every Muslim is required to perform. In addition, the unitary force suggested by the term is misleading. The one billion Muslims world-wide, stretching from the Middle East across Europe and into China, do not form a cohesive entity. Their outlooks and aims are determined by differing historical, economic, social, and political forces.

Although in many western eyes, fundamentalism is seen as monolithic and hostile to modern and western ideas, the strategies, goals, and tactics of Islamic groups vary greatly. For instance, the Palestinian group Hamas and Lebanon's Hezbollah's *raison d'être* is to fight Israeli occupation. Islamic groups in Turkey have a completely different aim – to object to what they perceive as the government's increasing westernisation at the expense of Turkish and Islamic values. The Islamic movement in Iran, for example, gathered support as political activity was banned and the gap between rich and poor widened. This combination bred resentment and a desire for a return to fundamental values.

The common factor uniting violent Islamic movements is repressive rule, where freedom is restricted, where the positive aspects of globalisation and change touch only the minority, and where corrupt regimes make little distinction between the treasury and private wealth.

At an individual level, Islam's message of social justice, equality, and unity, coupled with feelings of loss of identity across the Muslim world, has been a strong catalyst for an Islamic revival. Islamic groups have been quick to spot the trend and to fill the vacuum left behind by the fall of communism and the failure of secularism. In poor areas across the Muslim world, Islamic groups have provided medical care and schooling in disadvantaged areas neglected by the government.

Economic prosperity has the power to soften the feelings of loss of identity and provide a way out of poverty and despair. Nevertheless, it is important to note that no Islamic group at the moment has a sophisticated economic agenda – all are motivated simply by opposition to the government, with Islamic revivalism forming the one route for the expression of that opposition. Islamic movements are likely to strengthen as long as the regimes remain mired in conflict and inefficiency.

The Role of Islam

In many ways, Islam should support TINA. For example, Islam has many of the characteristics of Protestantism, which helped motivate the rise of capitalism in the west. Like Judaism and unlike early Christianity, Islam has always harnessed the role of economic activity and wealth creation. Contracts are sacrosanct. Islamic banking, with its emphasis on risk-taking by all investors, actually promotes more responsible risk than western financial systems, with their insurance supports, which offer inducements for investors to take excessive risks.

In the moral dimension, political Islam has been a source of opposition to bad governance. But this bad governance, rightly or wrongly, has been identified with things western. That puts the friends of TINA at a disadvantage.

The New Game

The New Game is the story of a struggle between, on the one hand, the ideas of TINA, with its accompanying pressures of the emerging global system, and, on the other hand, the reluctance of some governments and groups to change. The friends of TINA go against many widely and strongly felt views in Middle Eastern countries. In particular, those who see TINA as the force of westernisation, argue that it implicitly or explicitly undermines both Islam and traditional culture. This argument gives leaders a spurious legitimacy in resisting the need for change and reform.

But there are three sources of pressure in relation to TINA that, in the end, prove irresistible.

The Force of Example: Countries such as Egypt, Tunisia, and Turkey continue to do well economically. EU pressure on Greece allows some economic and political support to be given to Turkey. This support, in turn, provides the EU with leverage for finding a way through the problems of human rights abuse and Kurdish separatism. In addition, some small countries, such as Jordan, also do well enough to give credibility to the view that openness and economic liberalisation pay dividends.

Global and Regional Pressures: In ***The New Game***, the emerging complex system of economic and political institutions provides both carrots and sticks to persuade those outside the game to join in. One area where these pressures play out is the Arab-Israeli Peace Process. Optimism waxes and wanes as personalities come and go and as specific pressure groups, whether of Israeli settlers or Islamic extremists, gain a commanding voice. Yet the logic of the Oslo agreements is inexorable, and all outside players, including countries such as Iran and Saudi Arabia, have an interest in maintaining pressure on the Israelis, Palestinians, and Syrians. On Netanyahu's departure there is another surge of progress, and by 2006, agreement is reached on all issues other than Jerusalem. On a regional level, the more confident EU also plays a part in encouraging reform and opens markets to its neighbours in North Africa and the Eastern shores of the Mediterranean.

"It was wrong in the 1980s to assume that one country, namely Saudi Arabia, could balance the market while all others stood by. It is equally wrong to assume that a number of countries in OPEC with a world production share of no more than 41% are able to do the same now."

Hisham Nazer, Saudi Oil Minister

Oil: The Saudi decision to sell oil forward at $10/bbl brings all the Gulf countries face to face with reality – that oil alone is insufficient to create a viable economy and society.

Saudi Reforms

Perhaps the most dramatic effect of these changes occurs in Saudi Arabia. By the early 21st century, following the accession of the first king from the third generation from Ibn Saud, the new Saudi government recognises that long-term survival is predicated on two basic policies. First, given the implementation of the Kyoto agreements and the impending introduction of the supercar, the declining market share for Saudi oil in a global market with little hope for growth spells doom and must be reversed by raising oil production and letting prices drop to about $10/bbl. Second, this strategy, which actually increases expected Saudi revenues, needs to be complemented by husbanding remaining oil income more carefully. As part of its aggressive output expansion, Saudi establishes the 'Future Fund', which is meant to ensure adequate basic health and education for future generations that may not benefit from massive oil revenues.

Conservative economic policies help the Saudis survive the very difficult period of low oil prices as they expand output and drive other producers out of the market. Economic policies are tightened, and subsidies and hand-outs are reduced step by step. As a result, more and more citizens are forced to work and build businesses. Gradually, new businesses flourish that are not built on oil, and people gain confidence in the new order.

A major challenge for the economically modernising regimes remains, however – they must find ways to legitimise power and establish systems that can credibly transfer power to succeeding governments over time without risk of violent upheaval. Severe upheaval in Morocco after the death of King Hassan II and memories of the fate of President Suharto of Indonesia persuade key autocratic rulers to establish less personalised systems of governance. In addition, education reforms take hold, and work attitudes begin to change. By the end of the first decade of the new century, several Gulf states, among them Saudi Arabia, take their first steps towards a constitutional form of monarchy.

The Middle East in 2020

In 2020, many people still see the Middle East as turbulent and unsettled. But while there are still one or two states embroiled in constant international disputes, many countries are on the road to solid economic growth and a clearer set of rules. National Assemblies and Majlis across the region are exercising power. Sometimes, as in Kuwait in the late 1990s, this looks noisy and destabilising – but it is creating the framework for the rule of law, greater macroeconomic stability, and less predatory government behaviour.

Israel and its neighbours are not friends. Although the right of the existence of the State of Israel was acknowledged, at least by the Egyptian government, from Camp David onwards, it has taken twenty years of grudging acceptance and economic growth in Jordan, Egypt, and Palestine for the rest of the world to feel that stability is now assured.

By the end of the scenario period, it is clear that there is really only one path to success – to take advantage of productivity improvements in the world under a framework of orthodox economic policy. Government budgets must be managed prudently and prices kept stable. Borders must be open so that people can import best practice as well as advanced capital goods. Competition is required to provide people with incentives to work hard and innovate – and falling foul of the international set of agreements and instructions makes any progress very difficult.

People Power

In the world of ***People Power***, successful economic policies are difficult to sustain. While more and more people recognise that 'there is no alternative' to the forces of globalisation, liberalisation, and technology, they remain deeply suspicious about who benefits under any kind of regime. Incipient progress in countries like Egypt and Morocco is seen to benefit mostly cronies of the ruling elites. The result of TINA is seen in the ostentatious displays of new wealth – for example, in large parties in the posh hotels of Cairo, Beirut, and Damascus. Revelations of the extent of private wealth of Hassan II after his death trigger widespread protests organised by the Muslim brotherhood and bring Morocco to the brink of civil war.

Governments in the oil-rich Gulf States remain paralysed as they see their share of world oil markets steadily eroding. At the same time, they are incapable of overhauling their domestic patronage systems. Saudi Arabia, in particular, experiences repeated current account and fiscal deficits whenever prices fall below $20/bbl. From time to time, prices lurch up again, and governments gain breathing space – but that space just as quickly disappears when prices drop again in the volatile international oil markets. By 2005, net Saudi foreign assets are clearly negative. Government debt exceeds 100% of GDP.

In 2005, the drop in oil prices, combined with a succession crisis of the Saudi monarchy, triggers massive capital outflows. A currency crisis engulfs Saudi Arabia, and an Islamic opposition group takes over the government, appointing a member of the royal family to act as a figurehead king. Frightened rulers around the Gulf try to shore up their power in a variety of ways, ranging from strengthening their repressive machinery to introducing more democratic forms of government.

Where new Islamic regimes take the place of despised autocracies and tyrannies, they benefit initially from widespread popular support. Yet the mere replacement of the previous regimes does little for economic growth. Popular expectations in the new regimes are often disappointed. Initial populist measures sometimes worsen the crises, driving inflation up and undermining the climate for investment. Political escape valves, such as support for the fight against Israel, and the backing of all sorts of terrorist factions, increase instability in the region and create mounting disputes with Europe and the US. At the same time, more and more people try to find jobs in Europe, and the informal economy, including drugs, flourishes.

Populations are expanding very rapidly in many areas of the Middle East, faster even than in Africa. Growing numbers of young people are exposed to a contradictory mix of messages, from their schools, their mosques, their TV screens, and the internet. But the very multiplicity of these messages, together with more education, leads people to think more and more for themselves.

This kind of pressure, for example, was already visible in Iran in the late 1990s. Popular pressure for greater personal and economic freedom led to the election of President Khatami, who presided over the gradual opening up of Iran and its eventual integration into the new global economy. By the end of the 1990s, Iran was engulfed in quite radical debate that – although always under the banner of Islam – ultimately led to the adoption of orthodox economic policies driven by popular demands for greater opportunity and freedom. As a result of these policies, very slowly, over the years the new Islamic regimes face up to economic reality and abandon some of their radical and extravagant policies and promises.

By 2017 most Middle Eastern countries have adopted a democratic form of government and embraced the advantages of the global economy. Islam has proven its flexibility. As an old religion of merchant societies, it proves its value for commerce. The original openness of Islam to the pursuit of science re-emerges as people shed the attitude that all things western are despicable. This, combined with a growing variety of interpretations and applications of Islam, and in the absence of a dominating institutionalised clergy, encourages the experimentation, innovation, and economic growth that leads to modernisation.

The destruction of the old oil-based autocracies has also undermined their patronage systems at a time when oil revenues are running out. This transformation enables people in countries like Saudi Arabia to start from a fresh slate and to build their own post-oil economy on hard work and innovation. In ***People Power***, the people of the Middle East are increasingly self-reliant and regard most government activities as irrelevant. To the surprise of the west, Iran – with its separation of powers, open debate, and sensible macro-economic policies – becomes the model for the Middle East.

Russia

Russia Today

Official statistics reflect the old, dying Soviet society. Two economies exist, as well as two societies. Tax rates are excessively high, so economic activity is hidden. For those Russians who are able to take advantage of an environment with few rules and weak enforcement of those rules, the new economy offers tremendous opportunities. Wealth, travel, and new experiences are open to those with drive, money, or connections. For some, Moscow is one of the most exciting cities on earth.

The Spirit of Enterprise

Tombstone advertisements currently abound in St. Petersburg. A dramatic rise in the death rate, caused by difficult economic and social conditions, has followed the collapse of the old order. But the situation also raises a business opportunity, now open to private entrepreneurs – and one with 250% profit growth in 1998.

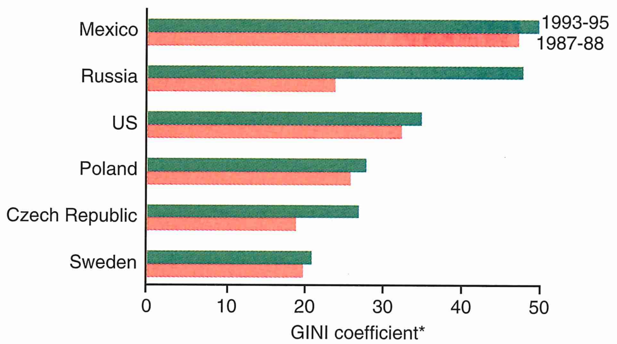
"Soviet society is dead but not buried. The corpse is present and decaying and new Russia grows from these rotten conditions. Decay of the corpse and growth of the new exist side by side."

Russian business consultant, age 28 – formerly Head of the Department of Price Dynamics in the Ministry of Economy

For many others, who have survived a decade of severe economic shock, a sense of new optimism is emerging because they have seen family or friends improve their standards of living in recent years. New jobs are opening up, and those who are willing to take the chance of moving see the possibilities of a better life. The past decade has also shown that there is little that governments can do to respond to economic problems. What is really needed are political leaders who will clean up corruption, make the streets safe, provide basic social support, and let people get on with life.

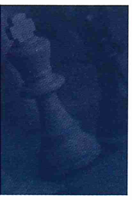
But for the quarter of the population living on pensions and the half living below the poverty line, the new world offers only hardship, with very little hope for improvement. The poor and the pensioned have obsolete skills and no connections, and they are unable to move to new jobs. Their only hopes are to keep their current jobs until they retire, or that someone in the family will support them. If they could vote the corrupt bastards out of power, they would, but their vote seems to count for so little.

Income Distribution Comparisons



* A GINI value of 0 means total equality and 100 means total inequality

Source: *World Bank, 1997; Milanovic, Income, Inequality and Poverty during the Transition from Planned to Market Economy, 1998*

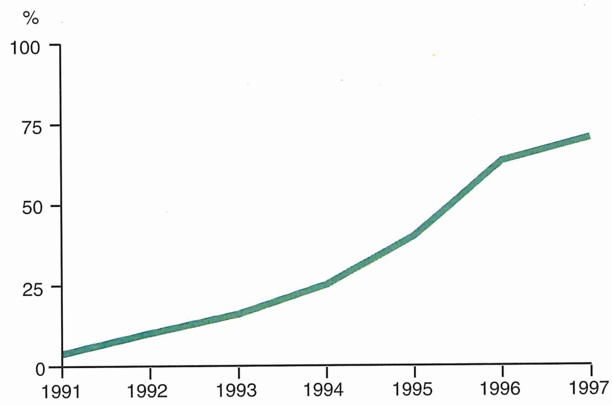


The New Game

After yet another false start to the promised economic recovery, Russian political and business leaders recognise that a new approach is required to complete the transition from command to market economy. Inside deals and close ties to the political leadership have allowed favoured individuals to assemble massive holdings of former state assets at very low prices, while tax and legal breaks have helped businesses survive during a period of economic and social turmoil. But now that choice assets have been privatised, and property rights are subject to the whims of new, and potentially hostile, politicians, key business leaders push for the establishment of a rules-based economy to create a more secure foundation for their wealth.

With the unprecedented and politically motivated shift in economic control largely complete, the new economy must now deliver tangible benefits more widely, or risk severe backlash from an increasingly impatient population. Following the shocks of 1997-98, when low oil prices threatened to undermine the economy, pride begins to give way to a consensus on the need to attract inward investment into the broader economy and to break the dependence on natural resources. The consumer booms in Moscow and St. Petersburg have been exposed as little more than bubbles based on high oil prices.

Non-State Employment



Source: *Enterprise Restructuring and Economic Policy in Russia, World Bank, 1996*

Russian leaders also recognise that to participate in, and benefit from, ***The New Game***, Russia must lock itself into the international economy through membership of institutions such as the WTO and, eventually, the EU. This policy is needed, particularly, to secure agreements on large-scale energy exports to Europe and Asia, and to support the global aspirations of Russian businesses.

New Rules

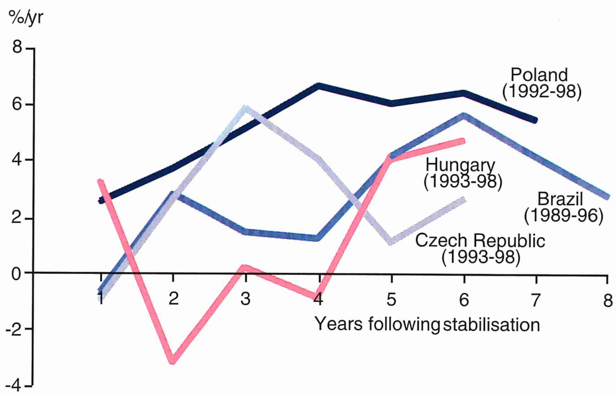
The government elected in 2000 works hard with a new Duma to complete the 'reform' agenda, including the completion of the passage of the long-delayed comprehensive tax code, new legislation allowing land ownership, and sweeping administrative reforms. The new government also negotiates a consensus with the regions over how to deal with revenue sharing and economic control. A pragmatic spirit of co-operation emerges to break the logjams that have stifled investment.

In exchange for these reforms, the new President agrees to strengthen social safety nets, clear pension arrears, exert greater control over the revenues from major industries, and enforce harsh punishment for tax avoidance. Taxes on resource production remain high to help government finances. The new market economy is pledged, finally, "to deliver benefits for all and not just a few."

Between Theory and Practice

But to understand the game, including the passage of new legislation, is only a first step. To play well also requires effective implementation. Russia needs new institutions and officials with new skills to enforce these rules. Effective tax and legal administration is weak in the early years, particularly when it comes to complex resource agreements. Foreign firms are especially disadvantaged. The new tax code overrides previous Production Sharing Agreements for resource development, resulting in significant confusion until the laws can be harmonised. Just as Eastern Europe and other countries emerging from major economic restructuring have discovered, many years are required to create a credible policy environment to support stable economic growth.

GDP Growth Following Economic Stabilisation



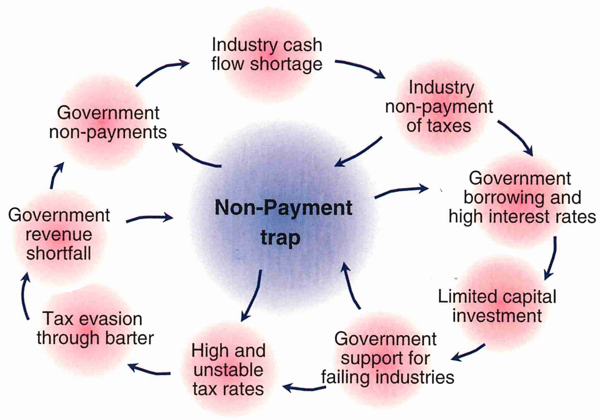
Source: *DRI, 1998*

Rocky Road to The New Game

The new government inherits an economy where tax and wage arrears and other unfunded liabilities are equivalent to one third of economic output and where almost half of all industrial enterprises are losing money. Many firms have survived by not paying wages – supporting their workers, instead, through the provision of food and housing. In the past, the government turned a blind eye when these companies did not pay their taxes, but now, such firms are left to fail. The government recognises that to break the vicious cycle of barter and non-payments, hard budgets must finally be enforced.

Tyumen Oil is pushed into bankruptcy in 2001 for non-payment of taxes – a test case for the new bankruptcy law, which is used to hasten the demise of 'value-destroying industrial dinosaurs'. Some high-profile tax debtors are tried and imprisoned, and there is a major shakeout of the financial sector. Over half of Russia's fifteen hundred banks fail during a three-year period. But this necessary restructuring is completed, without serious disruption to the capital markets, through government co-ordinated mergers with stronger banks.

The Vicious Circle of Non-Payments

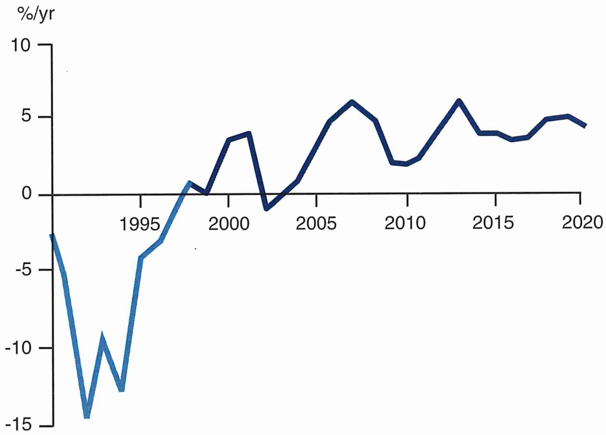


Many of the failing industrial firms are in one-industry towns. The new safety net is wide enough to care for only the most needy, and in the wake of these shocks, social unrest begins to flare up. Internal migration creates large strains in cities such as Moscow, with periodic outbreaks of violence between residents and newcomers. But this unrest never spreads beyond localised outbreaks, in part because the growing middle class is more interested in taking advantage of the new opportunities than in organising protests.

The new legal and tax framework spurs a boom in domestic and foreign investment. Thousands of new businesses are created, particularly in consumer goods and manufacturing. These new opportunities encourage workers to risk changing jobs. The black economy declines from over 25% of total output to around 15%, a proportion similar to Italy's in 1998. Economic growth climbs to 5% in 2002 – the first year of strong growth in almost two decades. The difficult hurdle of resuming foreign debt repayment in 2002, after five years of grace, is overcome without problems.

But this first period of economic recovery is almost derailed by the collapse in oil prices in 2003 and 2004. The decision by Saudi Arabia to expand production and increase market share, partly as a result of anticipated oil production expansion in Russia and Central Asia, drives the oil price below $10/bbl. A number of Russian oil companies default on international bank loans, and oil and gas activity drops substantially, leading to dramatic decreases in export receipts and government revenues. With help from the EU in the form of a stabilisation fund, the government manages a staged devaluation of the rouble, which provides a boost to the emerging consumer goods industry. Economic growth resumes, but remains volatile and uneven.

Russia: GDP Growth



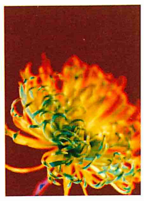
Broad-based Growth

Persistent low oil prices highlight the danger of over-reliance on the resource sector for economic growth. The government embarks on a programme of encouraging industry and services in order to diversify the economy. The government also finds that new rules and institutions are insufficient to ensure that the economy moves onto a steady growth path. The entrenched power of large Financial Industrial Groups (FIGs), with control over half the economy, is hindering competition in key sectors. In 2004, the Ministry of Finance succeeds in pushing through a restructuring programme to break up the electricity sector. This paves the way for the forced divestiture of assets of major companies, such as Gazprom, to their competitors. The strengthened Anti-Monopoly Commission takes action to halt and, in some instances, reverse the process of consolidation in the oil and industrial sectors. After merging with Sidanco, Lukoil is forced to sell off parts of its business.

Weak oil prices and shareholder pressure finally force Russian resource firms to restructure, a process which takes a number of years, but which is generally successful. In 2006, Lukoil becomes the first Russian company to be listed on the New York Stock Exchange. With their domestic house in order, the major Russian resource companies turn their attention to spearheading oil, and particularly gas, export projects to Asia.

In 2008, Russia joins the GCC, the successor to the WTO. From 2009, the rouble is increasingly linked to the Euro, in preparation for full membership of the EU. With almost a decade of experience implementing the new tax and legal structure, foreign investment grows strongly after 2010, helping to drive a period of modest but steady growth in an ever-broadening economy.

People Power

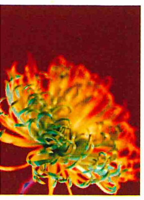


In ***People Power***, consensus on how the economy should be run, who should collect and keep tax revenues, and Russia's role in the world, is just not possible. After seven decades of enforced uniformity, individuals and different regions have no intention of bowing to a single vision from Moscow. Each region considers itself unique and pushes hard for control over its own economic, political, and social affairs. People resist efforts to create new rules and institutions – efforts that often look like thinly disguised means of solidifying control for the privileged. The Russians' nose for conspiracies keeps political debate fractious and fragmented.

Clean Start

In the election of 2000, a charismatic, populist President is chosen, who promises to eliminate corruption and the mafia, restore the power of Russian industry, and 're-establish' close relations with Russia's neighbours. He will ensure that Russia never has to go cap in hand again to the IMF or to 25-year-old bankers.

The new government expresses interest in foreign investment but is unwilling to push through laws, such as enabling legislation for Production Sharing



Agreements, partly because of a backlash against foreigners, whom many Russians now view as competitors. The government's reaction to pleas from foreign firms for new laws and taxes is simply: "Why do you need all these laws? Just do business! If you are part of the Russian economy, you will be taken care of."

The Kremlin gives the major FIGs strong support, and early on, despite the economy's structural problems, industrial production starts to grow strongly. Special deals and exclusive licences are provided to favoured investors. Many foreign investors welcome the creation of a streamlined, one-stop source for approvals, and support the government's success in starting to control organised crime. Foreign investment, largely led by Russian offshore capital, rises sharply.

However, not all firms find the investment conditions acceptable. Often, licenses are awarded to firms that are more 'flexible' – or, as some would say, 'culturally sensitive'. In this environment, foreign firms find that strategic alliances are essential to survive.

"Our relations with the mayor's office are constructed on conditions of mutually beneficial co-operations rather than on a personal basis!"
Vladimir Guzinsky, Most Group

Parts of Russia emerge as centres of world excellence in areas such as electronic banking, sophisticated risk management and hedging instruments, and security systems for electronic commerce. Foreign firms are attracted by low-cost Russian scientists and mathematicians, available since the collapse of the defence industry.

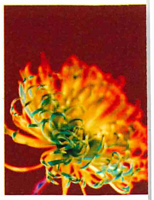
The Millennium Bangs

In 2002, just as the economy appears to be headed for recovery, the global 'Millennium Bangs' recession hits Russia hard. World demand for Russia's natural resources weakens. Foreign investment dries up as investors seek safe havens for their money.

Even after the world recovers from recession and resource prices rise, the result of the 2004 election keeps investors feeling nervous. The new government demands renegotiation of many of the deals agreed by the previous government. With the change of political leadership, those foreign firms with strong positions because of their favoured partners, now often find these partners a political handicap.

"A stupid friend is more dangerous than a clever enemy."

Old Russian proverb



Regional Tensions

There are occasional attempts to build consensus among the regions over power sharing, but the country is essentially run from Moscow by a small team close to the President, and representatives from the surviving FIGs. Increasingly, the regions view the country not only as run *from* Moscow, but also as run *for* Moscow. Serious conflicts emerge, some even leading to regional independence movements, such as the failed attempt in Dagestan in 2006. Following the repression of the regional independence movements, potential investors worry about unstable conditions, corruption, and the lack of a judicial system that could effectively enforce agreements and alliances. Towards the end of 2006, Russian capital flight triggers a currency crisis, which halves the value of the rouble.

The problems in Russia are mirrored in neighbouring countries, particularly the Ukraine, which, following Russia's lead, had fostered close ties between industries in the two countries through incentives for investment by Russian firms. These commercial ties begin to unravel under the strain of domestic economic turmoil. The Commonwealth of Independent States (CIS) finally collapses.

Political turmoil in Central Asia threatens to draw Russia into regional conflicts. Export pipelines are periodically shut down, and Russian oil and gas companies, facing political difficulties at home, are forced to pull out of the region. Potential projects to export energy to Asia collapse as government attention is directed towards domestic troubles. Investment in the oil sector declines, raising concerns that Russia could become a net importer of oil during the next decade.

New Power Sharing

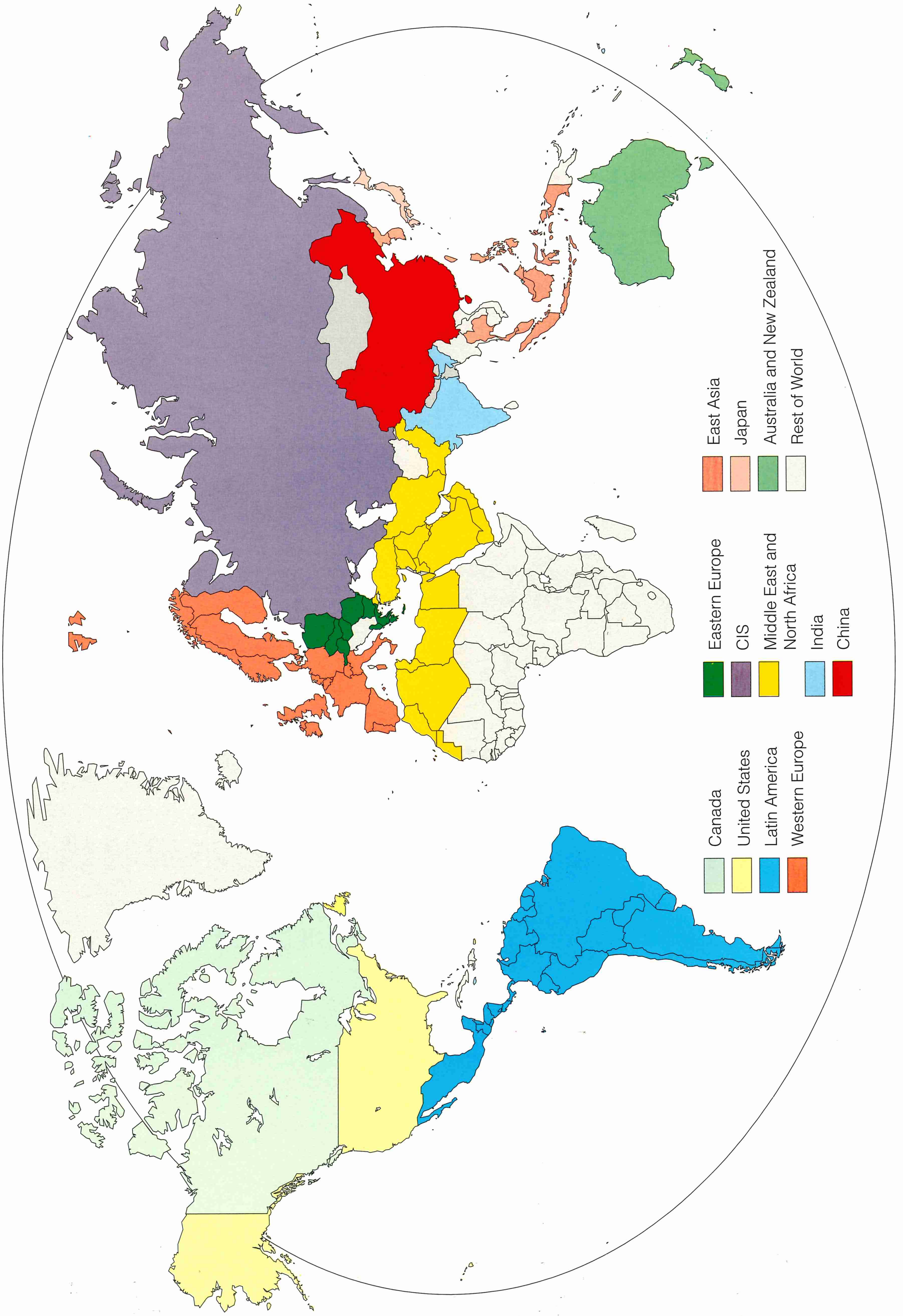
Largely overlooked in all the turmoil is the emergence of a new generation of business leaders, who are quietly building successful enterprises in the growing service economy. Using sophisticated communications technology, these firms have succeeded in overcoming the constraint of geography to build inter-regional enterprises. Many of these firms are connected through alliances that bypass Moscow.

Spread throughout the country, these young leaders recognise that conflicts among members of the old guard threaten to undercut the progress they have made. These leaders also want to limit the market power of FIGs and other large industrial firms that collude with government officials to block their expansion plans.

Because of the failures of all the attempts to regenerate the economy, a consensus begins to emerge that a less centralised, more liberal approach is called for. Started by a group in Novosibirsk, a new 'Party of the Regions' is created with the main aim of renegotiating power sharing under the constitution to ensure that regions such as Moscow cannot dominate the others. After winning the presidential election of 2012, the new government succeeds in changing the constitution, limiting the power of the president, and increasing the power of the legislature and judiciary. Many of the old FIGs collapse as their political support is withdrawn. With

political interference severely limited, and a new agreement on power sharing between the centre and the regions, the economy starts its first sustained period of growth in three decades. Economic growth climbs to over 8% by 2014 and averages 6% over the decade.

Quantification



Gross Domestic Product

	Constant US$ (bln) adjusted for differences in purchasing power*							% average annual increase					
	1990	1995	2000	2005	2010	2015	2020	1991-95	1996-00	2001-05	2006-10	2011-15	2016-20
The New Game													
Canada	605	652	737	829	947	1053	1225	1.5	2.5	2.4	2.7	2.1	3.1
US	6618	7274	8269	9290	10622	11805	13738	1.9	2.6	2.4	2.7	2.1	3.1
India	1139	1455	1907	2527	3318	4250	5730	5.0	5.6	5.8	5.6	5.1	6.2
China	2100	3698	5182	6799	10270	14068	18735	12.0	7.0	5.6	8.6	6.5	5.9
Japan	2603	2795	2977	3341	3656	3977	4426	1.4	1.3	2.3	1.8	1.7	2.2
Australasia	354	403	468	515	607	678	792	2.6	3.0	2.0	3.3	2.2	3.2
CIS	1885	1124	1197	1282	1559	1914	2363	-9.8	1.3	1.4	4.0	4.2	4.3
Western Europe	6955	7473	8403	9274	10406	11556	13165	1.4	2.4	2.0	2.3	2.1	2.6
Eastern Europe	772	712	863	1081	1353	1764	2306	-1.6	3.9	4.6	4.6	5.5	5.5
Middle East/North Africa	1705	2001	2410	2946	3657	4539	5716	3.3	3.8	4.1	4.4	4.4	4.7
Latin America	2603	3081	3708	4755	6213	8043	10422	3.4	3.8	5.1	5.5	5.3	5.3
East Asia	2200	3117	3564	4579	5750	7186	8950	7.2	2.7	5.1	4.7	4.6	4.5
Rest of World	1129	1326	1677	2079	2507	3115	3877	3.3	4.8	4.4	3.8	4.4	4.5
World Total	**30667**	**35109**	**41360**	**49296**	**60865**	**73949**	**91445**	**2.7**	**3.3**	**3.6**	**4.3**	**4.0**	**4.3**
People Power													
Canada	605	652	737	762	911	988	1128	1.5	2.5	0.7	3.6	1.6	2.7
US	6618	7274	8269	8556	10231	11118	12714	1.9	2.6	0.7	3.6	1.7	2.7
India	1139	1455	1907	2319	2985	3954	6168	5.0	5.6	4.0	5.2	5.8	9.3
China	2100	3698	5083	5695	7617	10127	13290	12.0	6.6	2.3	6.0	5.9	5.6
Japan	2603	2795	2962	3004	3596	4221	4729	1.4	1.2	0.3	3.7	3.3	2.3
Australasia	354	403	468	496	616	750	920	2.6	3.0	1.2	4.4	4.0	4.2
CIS	1885	1124	1180	1233	1379	1943	2674	-9.8	1.0	0.9	2.3	7.1	6.6
Western Europe	6955	7473	8403	8545	9043	10139	12182	1.4	2.4	0.3	1.1	2.3	3.7
Eastern Europe	772	712	863	971	1375	1805	2712	-1.6	3.9	2.4	7.2	5.6	8.5
Middle East/North Africa	1705	2001	2398	2621	2994	3522	3945	3.3	3.7	1.8	2.7	3.3	2.3
Latin America	2603	3081	3708	4212	6119	7844	10345	3.4	3.8	2.6	7.8	5.1	5.7
East Asia	2200	3117	3634	4171	5548	7118	9055	7.2	3.1	2.8	5.9	5.1	4.9
Rest of World	1129	1326	1672	1893	2362	2917	3873	3.3	4.7	2.5	4.5	4.3	5.8
World Total	**30667**	**35109**	**41283**	**44478**	**54775**	**66447**	**83734**	**2.7**	**3.3**	**1.5**	**4.3**	**3.9**	**4.7**

* Base year 1997, as per IMF World Economic Outlook, spring 1998

Energy Demand

The New Game

	mln boe/d							% average annual increase					
	1990	1995	2000	2005	2010	2015	2020	1991-95	1996-00	2001-05	2006-10	2011-15	2016-20
Total Energy													
OECD	88.9	96.6	102.3	102.7	99.9	96.2	92.8	1.7	1.2	0.1	-0.5	-0.8	-0.7
CIS and E Europe	35.8	25.8	28.2	29.8	31.8	33.8	34.3	-6.3	1.8	1.1	1.3	1.2	0.3
Others	46.0	57.4	72.0	88.9	110.2	134.2	160.2	4.5	4.6	4.3	4.4	4.0	3.6
Total	**170.7**	**179.8**	**202.5**	**221.4**	**242.0**	**264.1**	**287.3**	**1.0**	**2.4**	**1.8**	**1.8**	**1.8**	**1.7**
Oil (and Substitutes)													
OECD	38.4	39.9	42.5	41.2	37.1	31.7	26.6	0.8	1.3	-0.6	-2.1	-3.1	-3.4
CIS and E Europe	10.2	6.0	6.8	7.6	8.6	9.2	8.9	-10.1	2.7	2.1	2.5	1.4	-0.6
Others	18.5	24.1	27.3	36.1	46.8	52.7	56.8	5.5	2.5	5.8	5.4	2.4	1.5
Total	**67.1**	**70.1**	**76.6**	**84.9**	**92.5**	**93.6**	**92.3**	**0.9**	**1.8**	**2.1**	**1.7**	**0.2**	**-0.3**
Natural Gas													
OECD	16.8	20.1	21.2	24.6	27.5	31.3	35.6	3.7	1.1	3.0	2.3	2.6	2.6
CIS and E Europe	13.3	10.4	11.3	12.3	13.4	16.0	17.9	-4.8	1.7	1.8	1.7	3.6	2.3
Others	5.4	7.7	12.1	14.5	17.9	33.8	49.9	7.4	9.5	3.7	4.3	13.5	8.1
Total	**35.5**	**38.2**	**44.6**	**51.4**	**58.8**	**81.1**	**103.4**	**1.5**	**3.2**	**2.9**	**2.7**	**6.6**	**5.0**
Coal													
OECD	18.9	18.9	19.8	16.7	12.4	8.1	2.2	0.0	0.9	-3.3	-5.9	-8.2	-22.8
CIS and E Europe	9.5	6.5	6.9	6.8	6.7	5.2	3.9	-7.4	1.2	-0.1	-0.3	-5.0	-5.4
Others	16.7	19.7	25.0	28.1	31.3	28.2	23.6	3.4	4.9	2.3	2.2	-2.1	-3.4
Total	**45.1**	**45.0**	**51.7**	**51.6**	**50.4**	**41.4**	**29.7**	**0.0**	**2.8**	**0.0**	**-0.5**	**-3.8**	**-6.4**

OECD excludes Korea, Mexico, the Czech Republic, Hungary, and Poland.

A fuller breakdown of world energy demand will be made available on the Shell Wide Web.

Energy Demand

The New Game

	mln boe/d							% average annual increase					
	1990	1995	2000	2005	2010	2015	2020	1991-95	1996-00	2001-05	2006-10	2011-15	2016-20
Nuclear/Hydroelectricity													
OECD	14.5	16.8	18.0	18.2	18.7	18.9	19.4	3.0	1.3	0.3	0.4	0.3	0.5
CIS and E Europe	2.8	2.6	2.9	2.8	2.8	2.9	2.8	-1.5	1.8	-0.7	0.3	0.6	-0.6
Others	4.5	5.8	7.4	9.8	12.8	16.6	23.0	5.1	5.1	5.6	5.7	5.3	6.8
Total	**21.9**	**25.3**	**28.3**	**30.8**	**34.3**	**38.5**	**45.3**	**2.9**	**2.3**	**1.7**	**2.2**	**2.3**	**3.3**
Renewables													
OECD	0.9	0.8	0.8	1.9	4.3	6.2	9.0	-2.8	1.7	17.8	17.9	7.6	7.8
CIS and E Europe	0.2	0.3	0.4	0.3	0.3	0.5	0.7	14.8	1.8	-1.7	-0.8	9.1	7.9
Others	0.1	0.1	0.2	0.5	1.3	2.9	6.9	21.0	5.5	21.6	21.6	17.2	18.9
Total	**1.1**	**1.2**	**1.4**	**2.7**	**5.9**	**9.6**	**16.6**	**2.3**	**2.2**	**14.5**	**17.0**	**10.1**	**11.6**
Electricity													
OECD	30.9	38.0	40.6	41.3	42.4	43.0	44.1	4.2	1.3	0.4	0.5	0.3	0.5
CIS and E Europe	7.8	7.8	8.5	9.3	10.6	12.4	13.6	0.0	1.8	1.8	2.7	3.1	1.9
Others	16.7	22.5	28.9	35.6	43.9	53.1	69.1	6.2	5.1	4.2	4.3	3.9	5.4
Total	**55.4**	**68.3**	**78.0**	**86.2**	**96.9**	**108.5**	**126.7**	**4.3**	**2.7**	**2.0**	**2.4**	**2.3**	**3.2**

OECD excludes Korea, Mexico, the Czech Republic, Hungary, and Poland.

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Energy Demand

People Power

	mln boe/d							% average annual increase					
	1990	1995	2000	2005	2010	2015	2020	1991-95	1996-00	2001-05	2006-10	2011-15	2016-20
Total Energy													
OECD	88.9	96.6	102.3	105.1	109.4	109.3	109.1	1.7	1.2	0.5	0.8	0.0	0.0
CIS and E Europe	35.8	25.8	28.1	29.1	32.5	35.8	36.2	-6.3	1.7	0.8	2.2	2.0	0.2
Others	46.0	57.4	71.6	80.2	105.8	136.0	179.6	4.5	4.5	2.3	5.7	5.1	5.7
Total	**170.7**	**179.8**	**201.9**	**214.5**	**247.7**	**281.1**	**324.9**	**1.0**	**2.3**	**1.2**	**2.9**	**2.6**	**2.9**
Oil (and Substitutes)													
OECD	38.4	39.9	42.5	43.1	44.1	40.2	35.6	0.8	1.3	0.3	0.5	-1.9	-2.4
CIS and E Europe	10.2	6.0	6.8	7.2	8.4	9.5	8.4	-10.1	2.6	1.1	3.1	2.5	-2.4
Others	18.5	24.1	27.1	31.0	42.9	55.6	67.6	5.5	2.3	2.8	6.7	5.4	4.0
Total	**67.1**	**70.1**	**76.4**	**81.3**	**95.3**	**105.3**	**111.6**	**0.9**	**1.7**	**1.3**	**3.2**	**2.0**	**1.2**
Natural Gas													
OECD	16.8	20.1	21.2	22.8	24.2	29.7	35.6	3.7	1.1	1.4	1.3	4.1	3.7
CIS and E Europe	13.3	10.4	11.2	11.5	12.4	15.2	17.0	-4.8	1.6	0.5	1.6	4.1	2.3
Others	5.4	7.7	12.1	13.1	16.9	25.5	37.9	7.4	9.4	1.7	5.2	8.5	8.3
Total	**35.5**	**38.2**	**44.5**	**47.4**	**53.6**	**70.3**	**90.5**	**1.5**	**3.1**	**1.3**	**2.5**	**5.6**	**5.2**
Coal													
OECD	18.9	18.9	19.8	20.8	21.9	19.8	17.1	0.0	0.9	1.0	1.0	-2.0	-2.9
CIS and E Europe	9.5	6.5	6.8	7.5	8.5	7.5	6.9	-7.4	1.1	1.7	2.6	-2.4	-1.8
Others	16.7	19.7	24.9	27.2	33.9	38.5	47.5	3.4	4.8	1.8	4.5	2.6	4.3
Total	**45.1**	**45.0**	**51.5**	**55.4**	**64.3**	**65.9**	**71.5**	**0.0**	**2.7**	**1.5**	**3.0**	**0.5**	**1.6**

OECD excludes Korea, Mexico, the Czech Republic, Hungary, and Poland.

A fuller breakdown of world energy demand will be made available on the Shell Wide Web.

People Power

	mln boe/d							% average annual increase					
	1990	1995	2000	2005	2010	2015	2020	1991-95	1996-00	2001-05	2006-10	2011-15	2016-20
Nuclear/Hydroelectricity													
OECD	14.5	16.8	18.0	17.2	17.0	16.6	16.5	3.0	1.3	-0.9	-0.2	-0.4	-0.2
CIS and E Europe	2.8	2.6	2.9	2.6	2.8	3.0	3.0	-1.5	1.7	-1.7	1.2	1.4	0.3
Others	4.5	5.8	7.4	8.4	10.9	13.7	20.3	5.1	5.0	2.7	5.2	4.7	8.1
Total	**21.9**	**25.3**	**28.2**	**28.2**	**30.7**	**33.3**	**39.7**	**2.9**	**2.2**	**0.0**	**1.7**	**1.7**	**3.6**
Renewables													
OECD	0.9	0.8	0.8	1.3	2.2	3.1	4.3	-2.8	1.7	9.8	10.6	6.9	7.2
CIS and E Europe	0.2	0.3	0.4	0.4	0.4	0.6	0.9	14.8	1.7	0.2	3.2	8.2	7.1
Others	0.1	0.1	0.2	0.5	1.3	2.6	6.3	21.0	5.4	19.8	22.7	15.5	19.3
Total	**1.1**	**1.2**	**1.4**	**2.1**	**3.9**	**6.3**	**11.5**	**2.3**	**2.1**	**9.3**	**12.6**	**10.2**	**12.8**
Electricity													
OECD	30.9	38.0	40.6	41.3	43.5	45.2	47.5	4.2	1.3	0.3	1.1	0.8	1.0
CIS and E Europe	7.8	7.8	8.4	8.8	10.5	12.8	14.7	0.0	1.7	0.8	3.7	3.9	2.8
Others	16.7	22.5	28.7	32.9	42.4	53.4	78.9	6.2	5.0	2.6	5.2	4.7	8.1
Total	**55.4**	**68.3**	**77.7**	**82.9**	**96.4**	**111.4**	**141.0**	**4.3**	**2.6**	**1.3**	**3.1**	**2.9**	**4.8**

OECD excludes Korea, Mexico, the Czech Republic, Hungary, and Poland.

A fuller breakdown of world energy demand will be made available on the Shell Wide Web.

The New Game

Crude Oil (Arab Light fob) (1997 $/bbl)

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
17	21	19	14	18	18	22	17	9	10	10	10	10	10	10	10	10	10	10	10	10	10	9	9	8	8

Energy Supply

	1990	1995	2000	2005	2010	2015	2020
Oil (and Substitutes) Production (million boe/d)							
Conventional Oil	59.8	61.5	66.6	73.3	79.3	76.7	71.5
NGL	5.4	6.5	7.6	9.2	10.5	14.2	18.1
Heavy Oil	0.6	0.7	0.8	0.8	0.8	0.8	0.8
Processing Gains	1.3	1.4	1.5	1.6	1.9	1.9	1.9
Total	**67.1**	**70.1**	**76.5**	**84.9**	**92.5**	**93.6**	**92.3**
Conventional Oil Production (million b/d)							
Russia and Caspian Region	11.6	7.0	7.2	7.7	7.0	6.9	6.4
Other non-OPEC	25.3	29.8	33.2	29.5	25.0	24.0	23.0
Saudi Arabia	6.4	7.8	7.3	11.8	16.5	15.7	13.8
Other ME OPEC	9.2	9.1	9.9	13.7	19.8	19.1	17.3
Other OPEC	7.3	7.9	9.0	10.6	11.0	11.0	11.0
Total	**59.8**	**61.5**	**66.6**	**73.3**	**79.3**	**76.7**	**71.5**
Gas Production (mboe/d)	**36.3**	**38.8**	**44.7**	**51.4**	**58.8**	**81.1**	**103.5**
Coal Production (mboe/d)	**45.3**	**45.3**	**51.9**	**51.9**	**50.6**	**41.6**	**29.9**

Crude Oil (Arab Light fob) (1997 $/bbl)

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
17	21	19	14	14	15	12	25	20	12	14	16	18

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
20	20	20	14	11	14	18	25	30	25	20	18	16

Energy Supply

	1990	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**
Oil (and Substitutes) Production (million boe/d)							
Conventional Oil	59.8	61.5	66.6	70.3	81.4	86.9	87.6
NGL	5.4	6.5	7.6	8.5	9.6	12.5	15.9
Heavy Oil	0.6	0.7	0.8	0.8	2.5	4.0	6.0
Processing Gains	1.3	1.4	1.5	1.6	1.9	2.0	2.1
Total	**67.1**	**70.1**	**76.5**	**81.2**	**95.4**	**105.3**	**111.6**
Conventional Oil Production (million b/d)							
Russia and Caspian Region	11.6	7.0	6.9	7.8	10.0	10.0	10.0
Other non-OPEC	25.3	29.8	32.0	33.5	35.0	31.5	31.5
Saudi Arabia	6.4	7.8	7.8	8.3	9.8	13.4	13.5
Other ME OPEC	9.2	9.1	10.5	11.1	14.4	18.9	19.6
Other OPEC	7.3	7.9	9.4	9.6	12.2	13.0	13.0
Total	**59.8**	**61.5**	**66.6**	**70.3**	**81.4**	**86.8**	**87.6**
Gas Production (mboe/d)	**36.3**	**38.8**	**44.7**	**47.4**	**53.6**	**70.6**	**90.6**
Coal Production (mboe/d)	**45.3**	**45.3**	**51.7**	**55.7**	**64.6**	**66.2**	**71.8**

Produced by Publicity Services SLBPC 25240/8.98/1m